LAFFER ASSOCIATES ECONOMIC OUTLOOK: 2010 AND BEYOND

By Arthur B. Laffer



John Connally was Secretary of the Treasury when federal budget deficits were huge by standards of the 1970s. When asked about the deficit problem, his reply was, "The true deficit problem in Washington D.C. is the deficit of horses' heads."

Forecast Summary

Over any extended period of time, no economy can be prosperous if the government is overspending, raising tax rates, printing too much money, over-regulating, and restricting international trade. It's really as simple as that. Especially when the U.S. economy appears to have "green shoots", it's imperative to remember the U.S. economy cannot have prosperity given the policies of the Obama administration and Congress.

During 2010 the economy will continue to improve, growing by more than 4%. By the end of 2010 the unemployment rate could fall to as low as 7.0% and the Obama Administration will be busting with pride and conceit. And then 2011 will enter center stage, followed quickly by an economic catastrophe. All the factors that will make 2010 (and have already made the last half of 2009) look so good will reverse direction, and 2011 will be a train wreck. The first effect is the so-called "slingshot" or "freefall" effect. Whenever an economy stops freefall, as the U.S. economy has, everything seems better because it's getting worse more slowly. The slingshot effect will exert a powerful positive influence on the U.S. economy in 2010 but won't exist in 2011.

The second effect pertains to the Fed's wildly expansive monetary policy, which has produced a stock market boom, near zero interest rates and a general feeling of euphoria. Those effects will persist for most of 2010, but will reverse in 2011. Excessive monetary expansion will gradually turn into higher inflation and higher interest rates during 2010 and 2011 and beyond. Any attempt to reign in excessive monetary expansion would lead to an immediate and precipitous economic collapse.

The third and final effect has as its critical feature the tax boundary of January 1, 2011 when President Bush's tax cuts expire. In addition to this tax increase boundary, there will probably be lots of other Obama Administration tax increases centered on January 1, 2011.

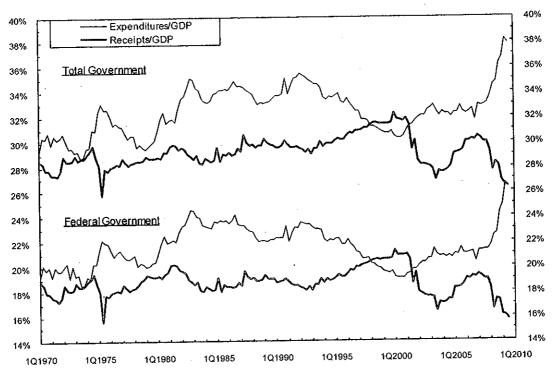
In anticipation of known tax increases the U.S. economy will shift income and output from 2011—the higher tax year—into 2010—the lower tax year. As a result of this income shift, 2010 will look a lot better than it should, and 2011 will be a train wreck.

The General Outlook

By comparing the idyllic policies of each of the four grand kingdoms of economics with current policies we can see just where the economy is headed.

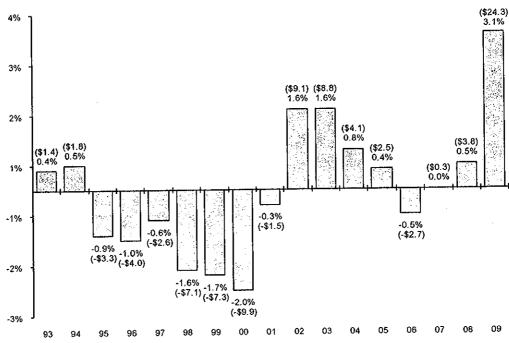
Ideally fiscal policy consists of spending restraint and low rate flat taxes. Today's U.S. fiscal policy is as far out of control as I've ever seen. Budget deficits and government spending are the highest they've been in over half a century. Federal, state and local government spending is 38% of GDP with federal government spending accounting for 27% of GDP. Meanwhile, tax receipts are below 16% of GDP for the federal government, and just slightly above 26% for federal, state, and local taxes (Figure 1).

Figure 1
U.S. Government Expenditures and Receipts as a % of GDP (quarterly, percent, through Q3-09)



In 2010 the U.S. will have a payroll tax rate increase, an estate tax increase and income tax increases. There's also a tax increase coming in 2010 on carried interest. This rate will rise from its current level of 15% to 35%, and then it will rise again in 2011. On state and local levels, there is also no government spending restraint and state tax rates are rising (Figure 2). In short, fiscal policy in the U.S. is in terrible shape, and it's moving in the wrong direction.

Figure 2
Net State Legislated Tax Changes as a % of Previous Year Tax Collections (and in \$billions)
(annual, percent, through FY-09)



The key to good monetary policy is steadfastness and stability. The analogy I like using is that monetary policy is like driving a tanker full of highly flammable materials on a very narrow bridge over a deep, deep, rocky gorge. There's just no room for error, and adjustments that need to be made must be tiny, incremental and measured.

The objective of good monetary policy is for the Fed to provide as much certainty for the value of the U.S. dollar going out into the future as possible. Everyone wants to know that the value of a dollar 30 years from now, 20 years from now, 10 years from now, and 5 years from now, will be approximately the same as its value is today, so that we can all make contracts in dollars and not have to worry about inflation or deflation. Stability is everything.

A little over a year ago Federal Reserve Board Chairman Ben Bernanke oversaw the single largest increase in the monetary base in the history of the United States, from colonial times to the present, times ten (Figure 3). As a result, short term interest rates are now down close to zero, which is almost as low as they can go. I have never seen a worse monetary policy in my life.

• Incomes policies include all of the indirect ways government affects business: regulations, restrictions, requirements, healthcare, minimum wage, wage and price controls, union activity, and the like. U.S. incomes policies have been pretty good but are currently moving rapidly in the wrong direction. The federal minimum wage was raised by 41% in the last two years. There has been an enormous amount of government directed pro-union activity. Health care "reform" is coming, and there are a lot of regulations coming on energy as well.

There has been a sharp change in direction for U.S. economic policy, away from reasonable regulatory policy towards the unreasonable. Now we all understand that a country has to have regulations. People can't wake up in the morning and decide which side of the road to drive on. But, the ideal incomes policies are designed to achieve the specific objectives at hand without going beyond those objectives thereby doing collateral damage to the overall economy. Good regulatory policy avoids unintended consequences. The U.S. is moving away from the ideal incomes policies at light speed.

• Ideal trade policy occurs when there are no impediments to the free flow of goods and services and people across national boundaries. For the sake of the economy, free trade is essential. There are some things Americans make better than foreigners, and there are other things foreigners make better than Americans. We and they would be foolish in the extreme if Americans don't produce and sell to foreigners those things Americans make better than foreigners, and foreigners don't produce and sell to Americans those things foreigners make better than Americans. Free trade is a win-win situation for everyone. It's called comparative advantage, or the gains from trade, the theory of which dates way back to the writings of English economist David Ricardo.

There are both consumption gains from trade and production gains from trade, and the U.S. today is among the freest trade countries in the world. But while we're very free-trade today, we are moving in the wrong direction. The stimulus bill had "buy America" provisions. The U.S. under President Obama has now restricted Mexican trucks from entering the U.S. The U.S. has also imposed restrictions on imports from China. The President on a number of occasions has shown his distaste for NAFTA and the Colombian Free Trade Agreement. America is moving in the wrong direction.

From the perspective of the four grand kingdoms of economics, I see a U.S. economy that is overspending, raising tax rates, printing too much money, over-regulating, and starting to restrict international trade. And to repeat, an economy cannot be prosperous when all four kingdoms are moving in the wrong direction.

Green Shoots

But in spite of all the bad economic policies, there definitely are green shoots. So-called green shoots are positive economic indicators, which have started to appear in the last few months of 2009 and are going to be quite prevalent throughout 2010. 2010 is going to look like a good year. In fact, my forecast for 2010 is as positive as anyone's. The unemployment rate could easily fall to 7.0% by the end of 2010. Real GDP growth will be greater than 4% for 2010, and the stock market clearly has signaled the economy moving way off its trough. The stock market is up over 65% from its March 2009 lows.

There are three major factors that contribute to the green shoots. The first factor is called the "slingshot/freefall" effect and is discussed at length in Alan Blinder's editorial, "The Case for Optimism on the Economy" in the December 16th *Wall Street Journal*, page A27. Alan Blinder, a Princeton professor with whom I don't often agree, is right on the money.

1.) The Slingshot/Freefall Effect

The first factor leading to green shoots is the freefall effect, or what Blinder calls the "slingshot" effect. To guote Blinder:

When the growth rate of any component of GDP rises, it gives overall GDP growth a boost. And going from sharply negative growth to zero is a notable rise. ... During the first half of this year, the investment component of GDP declined

¹ Dr. Ken Peterson on our staff has a different view of the world, but that's what makes a ballgame.

at a stunning 38% annual rate. Since the investment share of GDP then was about 14%, this implosion accounted for minus 5.4 percentage points of GDP growth. ... Then came the third quarter. Like a woozy prizefighter lifting himself off the canvas, the battered investment component of GDP managed to rise (at an 11% annual rate), which added 1.3 percent points to GDP growth rather than subtracting 5.4 percentage points. That 6.7 point swing was the start of the slingshot effect, which is not yet over.

And he's right; the slingshot effect isn't over by any means. Blinder writes how payrolls are extraordinarily tight right now, which means that firms will need to hire more workers as their sales and production grow. To quote Blinder again, "The data now show a clear trend that suggests that net job creation may be only a month or two away." This slingshot effect is a powerful force in this economy and soon will make the economy look a lot better. But this slingshot effect will long be a thing of the past by the time 2011 rolls around.

2.) The Fed's Printing of Money Effect

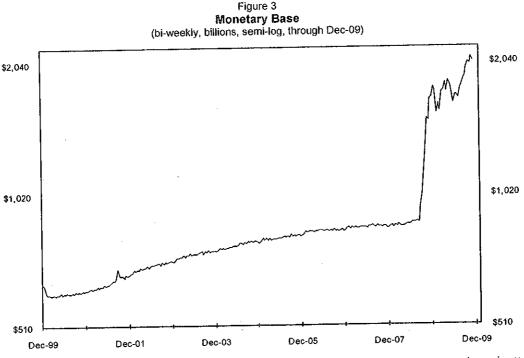
In addition to an enormous slingshot/freefall effect, we have a wildly explosive monetary policy. Again, Alan Blinder has this point nailed down. He writes:

Then there is the Federal Reserve's stupendously expansionary monetary policy. It is well known that interest rates work on the economy with long lags...history suggests that the time lag is closer to two years than to one. So even the normal policy lags are not over...the Fed continues to inject more medicine. Not by cutting interest rates, of course. Zero is as low as you can go, and the Fed arrived there a year ago. But "quantitative easing" is still in play. One example is the mortgage-backed securities (MBS) purchase program, which is adding MBS to the Fed's balance sheet.

Current monetary policy has been enormously expansive, which will stimulate stock prices, housing prices, commodity prices, the dollar prices of foreign currencies, and ultimately inflation. Quite possibly this expansionary monetary policy will also stimulate some real economic growth.

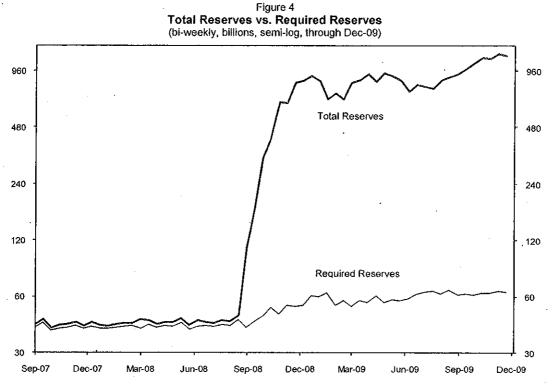
Chairman Bernanke had an economic epiphany a little over a year ago, prior to which he had taken the position that the Fed's primary role was to combat inflation. But, he then moved 180 degrees as he obsessed about being the Fed Chairman of the second Great Depression. In literally an instant the Fed pumped an additional \$1.2 trillion into the monetary base, bringing the monetary base to its current level of \$2.04 trillion (Figure 3).

Prior to the increase in the monetary base, banks in the aggregate could not issue additional liabilities without violating reserve requirements. In September 2008 banks' reserves were \$41 billion, and now they are \$1.12 trillion (Figure 4).

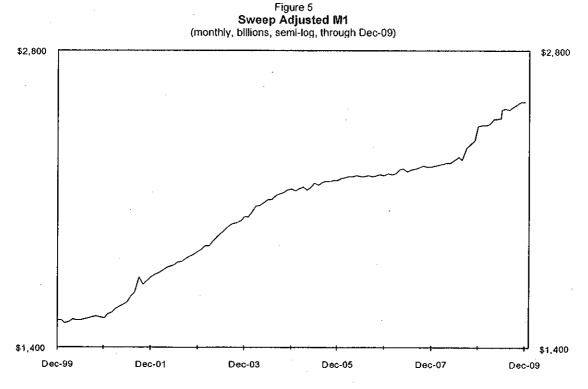


From start to finish the monetary base increased 128% (Figure 3 again), while total bank reserves have increased 25 fold (Figure 4 again). When banks have no reserve constraints, they are free to issue liabilities. It is this relationship between the

monetary base and the money supply that constitutes the first of two stages of the monetary process. When the monetary base is first increased, the money multiplier declines by exactly the amount of the increase in the monetary base, and there's no change in the money supply. But as time passes banks start issuing more liabilities, which they can do either by making loans—something they are not doing now—or they can buy assets from the private sector.



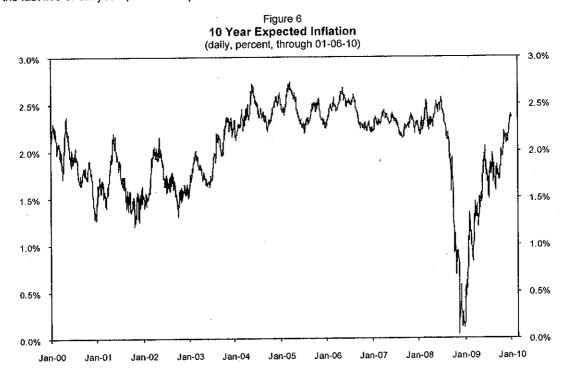
In due course following an increase in the monetary base, the M1 money supply should start to increase. And not surprisingly, that is exactly what has been happening (Figure 5). The increase in the money supply over the past 14 months has been 11.3%.



Surprising, however, is that real GDP growth year on year is currently -2.6% with annualized quarterly growth rates of -2.7%, -5.4%, -6.4%, -0.8%, and +2.2%. Usually when real GDP declines, money declines right with it. Not this time! Money growth has been high and real GDP growth has been low. The monetary process is a powerful mechanism.²

The second stage of the monetary process concerns the relationship between the money supply and prices. Generally in macroeconomics the relationship is called the equation of exchange. The equation of exchange is algebraically MV≈PY where money (M) times the velocity of money (V) equals the price level (P) times the volume of real income (Y). An increase in the money supply leads to an excess supply of money instantaneously and so velocity falls, but as time passes people readjust their portfolios and the excess money causes velocity to start to rise along with prices. This second stage of monetary analysis is also starting to happen.

The ten year expected rate of inflation has gone from roughly zero at the end of 2008 to about 2.25% today, an unusually sharp increase in so short a period of time (Figure 6). This sharp increase in expected inflation perhaps makes some sense following as it has one of the sharpest declines ever in the preceding months. Expected inflation today is no higher than it's been for the last five or six years, but I do expect it to continue to climb.

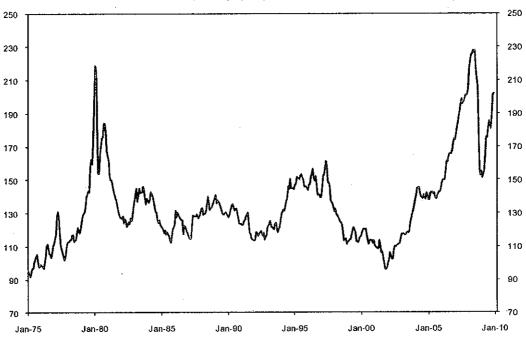


The steepness in the term structure of interest rates can also be an indicator of future inflation. The yield curve today is the steepest it has been in 16 years. Spot commodity prices have been rising much faster than they should be rising given the current state of the economy, which means impending inflation to me. In a recession like the one we're in today, spot commodity prices should be falling, not rising, yet today they are rising. Spot commodity prices today are more than double the level they were at during the 2001 recession (Figure 7), again representing a sign of impending inflation.

² Scott Grannis formerly of WAMCO of Pasadena, California has written a paper explaining the shortcomings of focusing on M2 as a proxy for money supply. In his paper, "The Confusing Connection Between M2 and Inflation," http://scottgrannis.blogspot.com/2009/12/confusing-connection-between-m2-and.html. December 15, 2009, Grannis explains why M1, not M2, is more appropriate when examining the relationship between the monetary base and money growth. To quote: "The source of the problem/conundrum here is that while M2 is an excellent measure of liquid money that is available to be spent, it is a much better of money demand than it is of money supply. According to the monetary theory of inflation, inflation occurs when the supply of money exceeds the demand for it; in other words, when the Fed supplies more money to the economy than the economy wants."

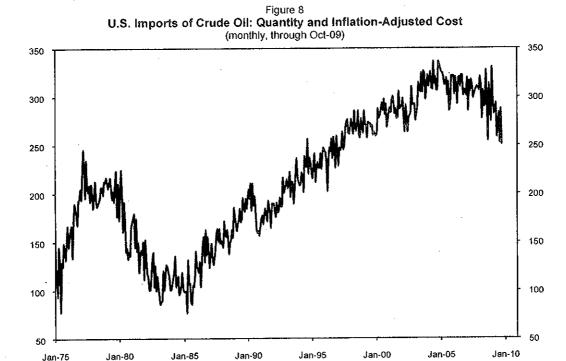
Figure 7

Dow Jones Spot Commodity Index (monthly, through Dec-09)



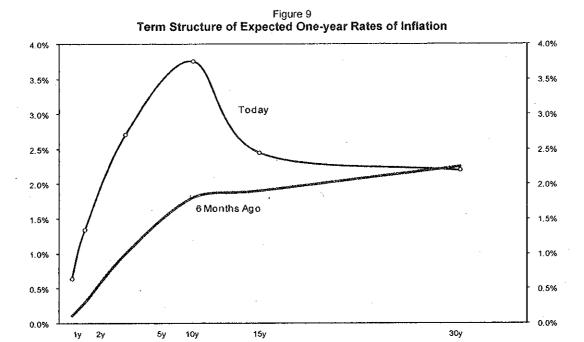
The foreign exchange value of the dollar has also declined over the past seven or eight years. Much of this depreciation can be explained by a terms of trade effect, i.e. the relative prices of U.S. and foreign products. As a result of the dollar's fall, the U.S. has moved from a huge trade deficit/capital surplus position to much smaller deficits. This kind of change in the trade balance does precipitate a change in the terms of trade – that's true. But there's also a substantial decline in the value of the dollar associated with the change in the U.S. dollar's expected relative purchasing power. The weakening dollar is reflecting differential expected rates of national inflation over the coming several years, which is all part and parcel of the Fed's increase in the monetary base.

Like exchange rates, there is also a non-inflationary component of an increase in gold prices that occurs in times of heightened fear. Gold prices have spiked from around \$265 an ounce in January of 2001 to just over \$1115 an ounce today. Not all of this increase in the price of gold can be attributed to an increase in inflationary expectations. I personally attribute the rise in the price of gold up to \$900/oz to fear—the bad economy, banking collapse, etc.—but beyond \$900/oz, the increase in the price of gold is attributable to inflationary expectations. Furthermore, oil prices today are much higher than they should be given the state of the world economy. U.S. net imports of oil are at their lowest levels in quite a while (Figure 8). In a deep recession oil prices should be very low, but they aren't—more evidence for future inflation.

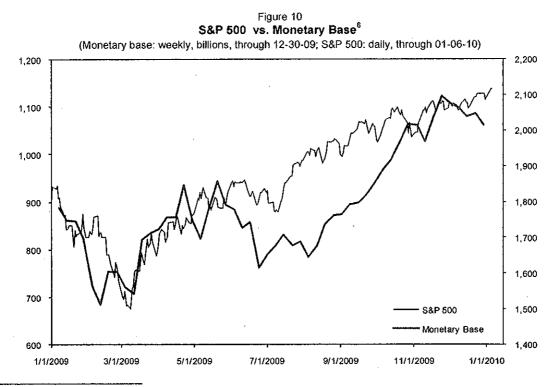


As mentioned earlier, the 10-year expected inflation is calculated by taking the difference between the 10-year nominal T-note yield and the 10-year TIPS (Treasury Inflation Protected Security) yield. By calculating expected inflation over different horizons—from one to ten years into the future—we can also develop a term structure of expected one year rates of inflation. The expected one year rate of inflation one year from now is calculated using the expected inflation derived from the 2-yr TIPS yield and the 2-yr nominal yield and then subtracting the one year expected inflation. To calculate the expected one year inflation for every year going forward, simply repeat this process for every year all the way out to 10 years. The end result is a term structure of expected one year inflation rates. These numbers show the expected one year rate of inflation rising sharply up to almost 4% over the course of the next six or seven years. Six months ago, the one year expected rate of inflation seven years from now was roughly 1.125% (Figure 9). The term structure of the expected one year rate of inflation has been rising sharply over the recent past.

³ Subtracting the (TIPS) yield from the nominal yield provides an approximation of expected inflation. The exact calculation for expected inflation is (1 + nominal yield) / (1 + real yield) – 1.



Substantial Increases in the money supply will not only lead to inflation, but will also lead to appreciating asset values. Suffice it to say, the Fed's printing of money has led to the recent sharp rise in stock prices (Figure 10). This is almost exactly what happened in the last half of 1999, when the Fed increased the monetary base dramatically, anticipating the Y2K problem. Asset values surged, and when the excess monetary base was removed from the system in January of 2000, asset values collapsed. In fact, the NASDAQ in the last half of '99 hit 5,000, and then subsequently came down in 2000. Even today the NASDAQ is only 2,300. The Fed's printing of money has definitely inflated stock prices. The Fed's policies have also given a huge shot in the arm to bond prices, causing interest rates to fall.



⁴ Arthur B. Laffer and Ford M. Scudder, "Following the Fed", Laffer Associates, March 19, 2009.

⁵ See Arthur B. Laffer, "Red Sky in the Morning: Investors Take Warning," *Laffer Associates*, November 12, 1999; and Arthur B. Laffer, "Deadly Serious: Four Key Issues for the New Year," *Laffer Associates*, January 7, 2000.

⁶ For monetary base we use the sum of reserve account balances at the Fed, currency in circulation, service related deposits and vault cash surplus.

Low interest rates and rising stock prices are both consistent with the current explosive monetary policy. In summary, we've had the printing of money effect. Sadly for us, the Fed printing of money effect can't continue. The stimulus from printing money is a short-term palliative and won't last. Following the near term explosion of the monetary base will be inflation.

3.) The Tax Boundary of January 1, 2011

The third green shoots effect is deadly serious and concerns the income deferral effect of changes in tax rates. President Obama, when he took office, agreed not to proactively eliminate Bush's tax cuts, instead he let them expire as scheduled at the end of 2010. So on January 1, 2011, tax rates are scheduled to rise dramatically. The personal income tax rate will increase from 35% to 39.6%, and if there is a health care 5.4% add-on as contained in the House version of the health care bill, this rate will increase to 45%. The dividend tax rate will increase from 15% to the top rate on ordinary income, also 45%, and the capital gains tax rate will increase from 15% to potentially 25.4% with a health care surtax. The carried interest tax rate will go from 15% to 35% in 2010, and then on January 1, 2011, it will go from 35% to 39.6% or 45% with the health care tax add-on. There are also taxes contained in the House passed version of cap-and trade, which will be added if that version gets through the Senate. Payroll taxes for incomes over \$200,000 are also scheduled to rise by 1.9% in 2010. I could go on, but what's the point. There are lots of tax increases in our future and many of them will be instituted on January 1, 2011. And, don't forget state and local tax increases as well.

Higher tax rates on January 1, 2011 will incentivize people to accelerate income out of 2011 and into 2010: Somewhere between 3 and 4% of GDP. GDP growth in 2010 will be some 3 to 4% higher than it otherwise should be, thus green shoots. The transfer of income from 2011 into 2010 will not only make 2010 higher than it otherwise would be it will also make 2011 3 and 4% lower than it otherwise should be because people have shifted income out of 2011 into 2010. The tax boundary that will occur on January 1, 2011 tells me that GDP growth in 2010 will be some 6 to 8% higher than GDP growth in 2011. A year on year decline from trend of some 6 to 8% in GDP growth would represent a larger collapse than occurred in 2008 and early 2009.

The effect of the shift in income on GDP growth in 2010, however, is going to be fairly substantial but when the U.S. economy comes to 2011, the train's going to come off the tracks. For a comparable anecdote, in 1981 when President Reagan's tax bill passed, the President gave me a congratulatory call, yet he sensed early in the conversation that I was not as excited as he thought I should be. He said, "What's the matter? You're not going to pour cold water on the tax bill, are you?"

And I said, "Oh, no, no, sir. I'm really ecstatic we passed the bill."

"What's the matter?" he said, "I mean, are you upset we didn't get the full 30% cut in taxes, we only got 25%?"

"No, sir. I'm really amazed that you got 25%. I didn't think you'd get that much. It's just incredible that you got the 25%. No one expected us to get the full 30."

"Well then what is it that's bothering you?"

"Well, sir, it's that you phased in the tax cuts."

"You've got to be practical Arthur. We have all of these Congressmen and all of these Senators who are worried about fiscal solvency and deficits. By phasing in the tax cuts, we were able to project smaller deficits, giving the Senators and Congressmen cover to vote for the bill. Quite simply that's why we have such a huge majority in both parties voting for our tax bill and our spending bill," he said.

"I know, sir. It's really wonderful that you were able to get such a large bi-partisan vote, but let me ask you a question, sir. How much would you shop at a store a week before that store has its big discount sale?"

The President hesitated for a moment and then said, "Oh my gosh. How bad is it going to be?"

"Sir, it's going to be a barn burner. People are going to defer income until January 1, 1983, and that deferral will have a huge impact on the U.S. economy," I explained.

Shortly after my conversation with the President, on December 21, 1981 I was interviewed by *Barron's* with regard to the tax bill. ⁷ Here's what I said in the midst of the fray:

Q. Well, are you disappointed, so far, with Reaganomics?

⁷ "No Shrinking Supply-Sider: Economist Arthur Laffer Keeps the Faith", Barron's, December 21, 1981.

A. I am not surprised about what's happening with the current Administration. But I'm disappointed, frankly, that Stockman had enough influence to convince the President to postpone the tax cuts.

Q. Why?

A. Let me answer this way: Suppose you have to go back to school and not earn income in one of the next two years. But you get to choose which year. Which year do you go back? This year, when tax rates are high, or next year, when tax rates are low? Which is the year you choose not to earn your income? That is what we are seeing happen.

So people were deferring their income so that they could take advantage of lower tax rates in the future, and they were accelerating expenses so that they could deduct them ahead of the tax cuts. That was what I was saying then. The interview continues:

- Q. What is your economic forecast, Arthur, for next year?
- A. 1981, obviously, has been a bad year because they postponed the tax cuts, and 1982 doesn't look great.
- Q. You said before, Arthur, that you think the timing of Reagan's tax cuts is off. Are you satisfied, though, that once the full impact of the program is felt...?
- A. Once we are in '83 and '84, we are going to be in a great economy.
- Q. You sound pretty definite about that.

A. Oh, yeah, there is no question of that in my mind. I couldn't be more certain of a proposition than I am of that, given the uncertainty of my profession. Everything I look at, the fastest-growing economies in the world—from the Ivory Coast to Hong Kong to whatever— all have low tax rates. High taxes reduce the incentive to profit, and you just don't expand really rapidly through government. Especially, not through redistribution policies.

Compare what I actually said to what actually happened to annualized real GDP growth rates by quarter from the first quarter of 1981 through the fourth quarter of 1984.

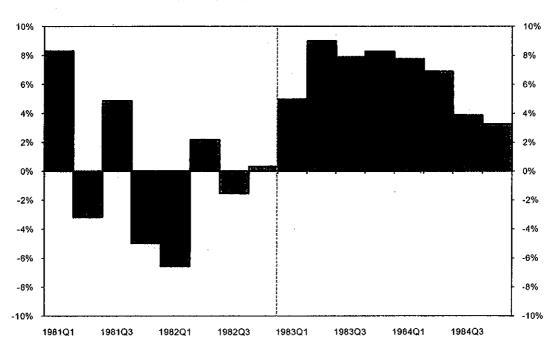


Figure 11

Real GDP Growth

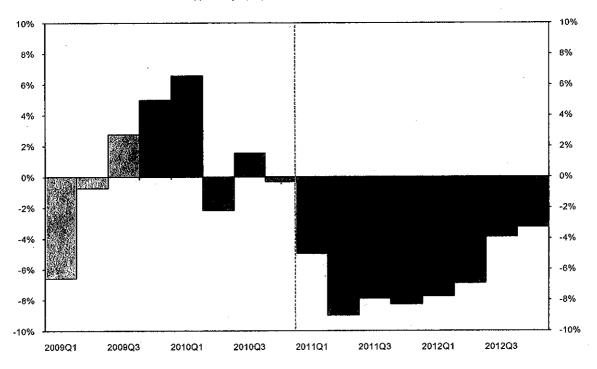
(quarterly, qtr/qtr annualized, 1981-1984)

Fast forward to today, the Obama administration bolstered by the Reid/Pelosi Congress has postponed tax increases. People will accelerate income out of 2011 into 2010, and that acceleration is going to lead to a seemingly very good economy in 2010 e.g. green shoots. Once we pass the January 1, 2011 tax border, however there will be a huge drop in real GDP growth. For the two years 1981 and 1982, real GDP growth was pretty close to zero, 3.0% below its long term averagel (Figure 11) In the first quarter of 1983, annualized quarter on quarter real GDP growth was 5%, second quarter

growth was 9%, third quarter 8%, and fourth quarter over 8% again. That represents four quarters positive growth for 1983 of 7.5% (Figure 11). And the growth continued. In the first quarter of 1984 growth was 8%, second quarter 7%, third quarter 4%, and by the fourth quarter of 1984 it had fallen to a respectable 3.5%. For 1984 real growth was slightly above 5.5%. That is over 6% real growth over the two years 1983 and 1984.

Imagine what will happen with Obama's mirror image of Reagan's policies. A mirror image in economic growth will occur (Figure 12). The deferral of the tax increases has led to a much rosier economic scenario for 2010 than otherwise would be the case, but this rosy scenario will be short-lived. You cannot have a prosperous economy when government is overspending, raising tax rates, printing too much money, over-regulating and restricting the free flow of goods and services across national boundaries. That's our forecast for 2010 and the beginning in 2011.

Figure 12
Estimated Real GDP Growth If 1981 – 1984 Effect Were Reversed (With Actual 2009 Growth)
(quarterly, qtr/qtr annualized, 2009-2012)



For those of you who are aficionados of recent economic history there has been a significant misconception of exactly what President Reagan's 1981 tax cut was. The 1981 tax bill did not change any earned income tax rates <u>per se</u>—save for two new rates at the bottom of the scale of 11% and 12%. All other earned income tax rates remained the same, including the highest rate of 50%. The so-called 25% tax cut made income tax brackets much larger but kept tax rates the same. The important features of the bill were:

Brackets extended much further out without tax rates being changed (Table 1).

Table 1

Table A-5	Federal	Individual Incor	ne Tax Rate Sc	hedules, 1979	-84 ^a
	1978 act		1981	act c,e	
Taxable income (dollars) ^b	Calendar Years 1979-8 ° ^{,d} ,*	Calendar Year 1981°,¹	Calendar year 1982	Calendar year 1983	Calendar year 1984
0 - 3,400	0.00%	0.00%	0.00%	0.00%	0.00%
3,400 - 5,500	14.00%	13.83%	12.00%	11.00%	11.00%
5,500 - 7,600	16.00%	15.80%	14.00%	13.00%	12.009
7,600 - 11,900	18.00%	17.78%	16.00%	15.00%	14.009
11,900 - 16,000	21.00%	20.74%	19.00%	17.00%	16.009
16,000 - 20,200	24.00%	23.70%	22.00%	19.00%	18.00%
20,200 - 24,600	28.00%	27.65%	25.00%	23.00%	22.009
24,600 - 29,900	32.00%	31.60%	29.00%	26.00%	25.00%
29,900 - 35,200	37.00%	36.54%	33.00%	30.00%	28.00%
35,200 - 45,800	43.00%	42.46%	39.00%	35.00%	33.00%
45,800 - 60,000	49.00%	48.39%	44.00%	40.00%	38.00%
60,000 - 85,600	54.00%	53.33%	49.00%	44.00%	42.00%
85,600 - 109,400 🗋	59.00%	58.26%	50.00%	48.00%	45.00%
109,400 - 162,400	64.00%	63.20%	50.00%	50.00%	49.00%
162,400 - 215,400	68.00%	67.15%	50.00%	50.00%	50.00%
215,400 and over	70.00%	69.13%	50.00%	50.00%	50.00%

- a. These rate schedules apply only to married persons filing joint returns.
- b. Includes zero-bracket amount.
- c. Does not include add-on minimum tax on preference Items or alternative minimum tax
- d. Earned income subject to maximum marginal tax rate of 50%
- e. Does not allow for the refundable earned-income credit,
- f. After tax credit of 1.25% against regular tax.

Source: Joseph A. Pechman, "Federal Tax Policy", The Brookings Institution, 1987, pg. 318

- Inflation indexing began in 1984.
- The difference between earned and unearned income tax rates was eliminated in favor of earned income tax rates
 (The Brodhead Amendment) effective in 1981.⁸
- As a result of the lower unearned income tax rates, the capital gains tax rate immediately fell from 28% to 20% in 1981. Capital gains taxes were calculated by excluding 60% of the gains and taxing the remaining 40% at the unearned income tax rate. This 60% exclusion was part of the 1978 Steiger-Hansen capital gains tax cut. The 1981 changes dropped the distinctions between earned (50% highest rate) and unearned (formerly 70% but now 50%) income tax rate, which resulted in the maximum capital gains tax rate going from 28% to 20%.
- The real tax bracket extensions weren't quite 25% because the extensions were based on the prior year's number. Therefore, a 5% cut in October of 1981 was on the original tax rates whereas the 10% cut in July of 1982 was on the brackets after the 5% cut e.g. 9.5% on the original tax brackets and the 10% cut in July of 1983 was on the 1982 brackets (8.55% on the original tax bracket) or a cumulative total cut of 23.05%—not 25%.
- The final feature of the 1981 tax cut was the phase in. Supposedly there was a 5% cut on October 1, 1981, 10% on July 1, 1982 and 10% on July 1, 1983. As mentioned above the cuts really only amounted to 23%, but also there is no such thing as a mid-year tax cut. For 1981, for example, withholding was changed on October 1, 1981 but instead of being a 5% cut for three months the cut was prorated over the whole year at 1.25% (25% x 5%). The cut for 1982 was the full 5% for 1981 plus half of the 10% cut scheduled for July 1, 1982, adding up to a full 10% cut for income earned in calendar 1982. For 1983—the full calendar year—the cut was 20%: the 5% from 1981, the 10% from 1982 and half the 10% for 1983.

The reason I dwell so heavily on the Reagan tax cuts is that Reagan's tax cuts were ostensibly less important to the economy of the early 1908s than are the Obama tax increases to today's economy. Thus my conclusion would be that Obama's tax increases will do more harm to the economy than Reagan's tax cuts benefited the economy.

⁸ William Brodhead was a Democratic Congressman from Michigan's 17th district from January 3, 1975 to January 3, 1983. A true American hero.

Housing

We have a housing paper coming out shortly that focuses on the Laffer Housing Affordability Index.9 Most affordability indices compare median house prices and average income. The Laffer Housing Affordability Index, on the other hand, focuses on what it costs a family of four per year to own a home, including financial benefits, relative to the family's after-tax income. Our measure of affordability is plotted below as is the conventional measure of affordability (Figure 13).

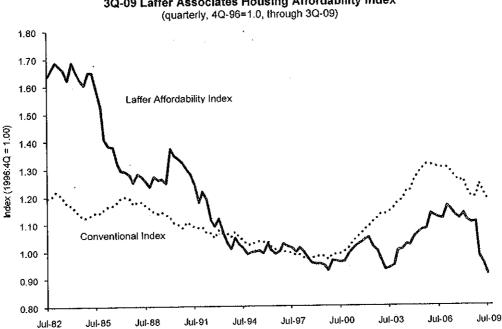


Figure 13 3Q-09 Laffer Associates Housing Affordability Index

There are a few simple points here. First, people buy homes with after-tax income, not with pretax income. Taxes really do affect after-tax income, and therefore can make a significant difference to these indexes and especially to their interpretations. As a point of fact, families are the primary owners of homes, not capita, so any measure of affordability should look at family income, not per capita income. In addition, affordability should be related to the annual cost of owning a home, and annual after-tax income. Conventional affordability measures relate the price of a home to pretax income, which in our view, isn't quite right. And in addition, just as a technical but important point, median home prices should be related to median income. Conventional measures of affordability compare median home prices to mean income. Median income figures do include zero-income families, so our index does take into account unemployment rates and underemployment. To summarize, the consensus measure of housing affordability is flawed for the following reasons:

- Families, not "capita," are the primary owners of homes.
- Families buy homes with after-tax income, not pre-tax income.
- Affordability relates the annual cost of owning a home to annual after tax income, not the price of a home to pre-tax income.
- As a technical but important point, median home prices should best be related to median income. The conventional statistics are misleading because they relate median home prices to mean income. Medians aren't means.
- Homeowners as opposed to other long-term debt issuers have the ability to refinance their mortgages without prepayment penalties, which is a significant benefit. We try to capture some of the advantages of being able to prepay mortgages without penalty by using the lowest mortgage rate for the past three years. Existing homeowners can refinance at will, which puts them on a par with new home buyers.

⁹ Arthur B. Laffer and Mark A. Wise, "Laffer Associates Housing Affordability Index, Third Quarter 2009", Laffer Associates, December 23, 2009.

 The '97 Tax Act essentially exempted owner-occupied homes from having any capital gains tax—for individuals that's \$250,000 every two years, and for a couple that's \$500,000 every two years. This can be a huge plus for homeowners

And finally, affordability is significantly impacted by restrictions on supply. The Laffer Housing Affordability Index does not incorporate the multitude of restrictions, fees, and requirements of all sorts, and all other impediments to building a home that currently exist across the country. An existing homeowner is benefitted by supply restrictions which act as barriers to entry for new homes. Supply restrictions can dramatically change the value of a home. When I was on the Board of Directors for Lyon Homes in Sacramento, just the fees associated with a building permit, having no benefits whatsoever, were about \$45,000. And these fees were only on the rise and headed higher (Table 1).

Fees at Building Permit¹⁰
(figures are approximations for average size single family detached homes)

Jurisdiction	2002	2007	% Increase
Contra Costa (San Fran)	\$40,000	\$75,000	87.5%
Lancaster (Los Angeles Co)	\$30,000	\$45,900	53.0%
Riverside County	\$31,500	\$45,500	44.4%
Rocklin (Sacramento)	\$24,000	\$45,000	87.5%
Roseville (Sacramento)	\$32,000	\$48,000	50.0%
San Diego County	\$21,900	\$27,790	26.9%
Stockton	\$21,000	\$51,000	142.9%

So that's just the starting cost, the non-refundable ante if you will. So, these supply restrictions do affect affordability. Analyzing our measure of affordability leads to the important point here that houses in the United States are currently the most affordable they have ever been. Maybe it's time to consider buying homebuilder stocks.

<u>Inflation</u>

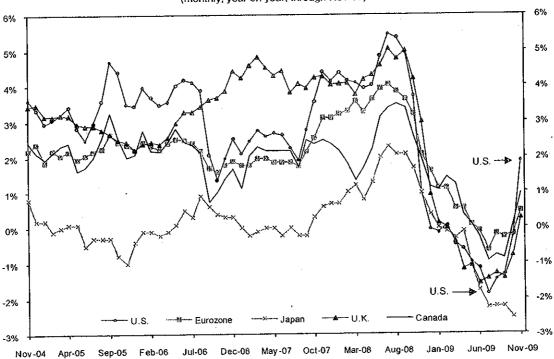
The major price indices peaked in July or August of last year, and then experienced a precipitous collapse until January of this year. Headline inflation numbers, as defined, compare the current month's price index with the same price index from one year earlier. Therefore the year on year change is comprised of the current month's number (the numerator) and the number from one year ago (the denominator). When the denominator is high, prices tend to look as though they are falling because of the 12-month ago number. As those 12-month ago numbers fall off their highs—and they have been falling off their highs—inflation numbers are going to be higher than people expected. Last November I wrote, "within the next three or four months, 12-month headline CPI inflation will be in the 2.5 – 3.0% range on its way even higher." ¹¹

Today's headline inflation number on the CPI is 1.9% year over year, and the headline inflation number for the producer price index (PPI) is 2.7% year over year. Inflation is no longer a big negative number as it has been for the past year. Comparing U.S. inflation with other countries, we've gone from a negative number last month to a substantially positive number this month. Over the past three months, we went from the second lowest inflation country to the highest. In fact, in the latest data, Eurozone year over year inflation went from -0.3% last month to 0.5% this month. The U.K. currently has 0.3% inflation, Canada 1.0%, and Japan -2.5% (Figure 14). Expect these inflation numbers to continue to rise.

¹⁰ Many thanks to our good friend Doug Neff at Institutional Housing Partners in Irvine, California for supplying this data.

¹¹ For further discussion see, Arthur B. Laffer, "Market Expectations and Causative Reasons for Inflation," Laffer Associates, November 10, 2009.

Figure 14 Inflation, Selected Countries (monthly, year on year, through Nov-09)



Question and Answer

Jay Huck-Egerton Capital

Q: In shorthand, you're saying that 2010 looks good, but 2011 look out. When do you expect this to be discounted in the market? Lord knows it's not going to wait until January 1, 2011.

A: There's no logic to how long it takes for the market to discount such information, because a lot of times the process doesn't happen rationally. Looking at some historical examples, the market troughed in August of 1922 ahead of the Harding and Coolidge tax cuts, and the economic boom began on January 1, 1923. So the market looked ahead about four or five months there. Then the market peaked in August 1929, just when the Smoot Hawley tariff bill was passed, and the Great Depression began shortly after. Again, the market was four or five months ahead of the economy. For the Kennedy tax cuts, the market troughed in June of 2962, and then Go-Go '60s really began when all of his policies took effect on January 1, 1963, about seven months later. Likewise, the market peaked in January of 1966 prior to start of the Johnson, Nixon, Ford, and Carter era. And, the market troughed in July of 1982 just before Reagan's tax cut took full effect on January 1, 1983.

So, you find the numbers historically have been around four to eight months. I don't know why that seems to be the discounting period, as you could seemingly argue it should be longer or shorter, but that's what you see historically in the numbers.

Peter McMullin-IPC

Q: What's going to happen with the stresses and strains in the euro market, and how do you see the dominant trend in the dollar right now?

A: Well, the euro market has a lot of the same problems we do, and especially with the peripheral nations like Greece, when it comes to debt and overspending. The central nations of the euro market do not. For instance, the problems in Germany and France are much less than they are in the United States, although the problems in the UK are just as bad. What I would expect to see is that that the green shoots effects of the printing of money, of the freefall stopping, and of the deferral effect bringing income into 2010 will probably be stronger for the U.S. than they are for the euroland. Accordingly, you may see a period of the dollar not being as weak as it should be versus the euro.

That could be part of what we've seen over the last few weeks as the dollar has strengthened. When you get a strong economy, you're going to get a stronger currency, and that is happening. The U.S. market is also up 65% from its low, which leads to people trying to buy into U.S. assets, and that is also helping the dollar. But I don't think any dollar strength will be long-lived. I think, at most, you've got about a 12-month window.

- Q: Increasingly I see people just turned off by the political scene in Washington, and more people are tending to be independent rather than one of the two parties. How does that play out in your views?
- A: It's very hard for fiscal conservatives to be a Republican after Bush's second term, which was very unattractive. For the last two years he just wanted out of office and conceded everything. And now people are looking at what Obama, Pelosi and Reid are doing, and it's making a lot of people scared to death of being a Democrat. So, the parties are both largely out of favor right now.

Elizabeth Bramwell—Sentinel Asset Management

- Q: Given the scenario you just laid out, what do you think happens to the stimulus plan, both for this country and also for other countries going forward?
- A: I think there will be less need for a stimulus package over the next six to eight months. You will see President Obama and the Democratic Congress with smiles on their faces, giving more and more speeches. You will see the election prospects for Republicans, which I think are very positive right now, dampen as the economy comes back. The Democrats will take credit for it, but I still think the Republicans will pick up a lot of seats in the House and some seats in the Senate. But I don't think the very optimistic view of Republicans taking control of the House, and maybe even taking control of the Senate, will happen because the economy will look better. And then when you cross that tax border in 2011, I think the train goes off the track. That's when you'll see the panic coming in within the Obama administration.

But for the time being, I think the Fed's doing all it can to make this election good for Obama, and I think the deferral of the tax increases will also be good for the near term election. But I think that come 2011, Obama will not have the same majority in the House or the Senate, so he won't be able to blindly push through really bad legislation as he has been doing thus far. Then the 2012 election will give America the chance to make a serious change. We've got to get good candidates, but there are some good ones out there. Not that I don't think President Obama is a good man. In fact, I have rarely seen a more admirable human with worse economic policies in my life than President Obama.

Moving to international situations, the British should have the chance for change much sooner than us. In May 2010 they have their general elections, and it looks like Gordon Brown is just going to get trounced. But when you look at Cameron and the Conservatives, I don't know that the opposition is really geared toward the policies of Reagan or Thatcher either.

Howard Phanstiel—Phanstiel Enterprises

- Q: Could you comment on the rise in asset prices in the BRIC countries and whether they are entering a bubble?
- A: I haven't studied the situation carefully enough to say whether these countries are in a bubble environment. Certainly Brazil and Russia are raw materials and hard asset based economies, and they should do well in inflationary times. Meanwhile, China and India have been putting in place much better responses to the economic crisis than the U.S. and many other developed countries. So you can understand why the markets in each of the countries would be performing well. But, I haven't looked closely enough to say whether or not current valuations represent a bubble.

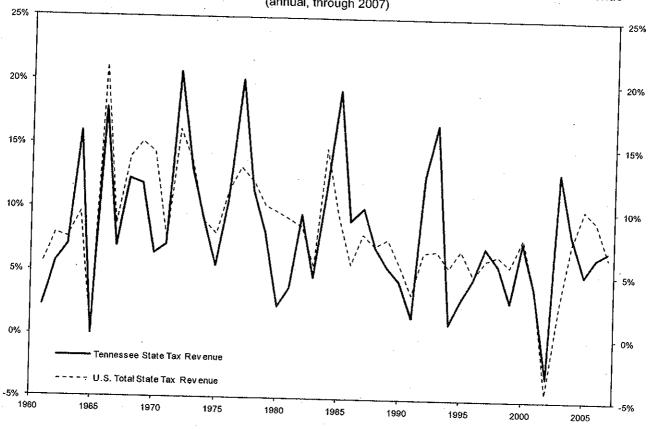
Vipin Sahijwani-Lynx Investment Advisory

- Q: You talked a lot about Ricardo, comparative advantage, and protectionism. How does that affect defaults by some international economies?
- A: Well, anything that hurts the domestic economy of a country will tend to precipitate defaults. I generally just look at it as an economist, with protectionism affecting economic growth and standards of living, but you're right. It would affect the defaults too. Firms will have to write assets down under mark-to-market, and cash flows will decrease, so it just makes for worse conditions. And I do think that protectionism is a really serious global disease. It's one of the few ways the U.S. can impact other countries negatively.

©2010 Laffer Associates. All rights reserved.

No portion of this report may be reproduced in any form without prior consent. The information has been compiled from sources we believe to be reliable, but we do not hold ourselves responsible for its correctness. Opinions are presented without guarantee.

Year on Year Growth in Total Tax Revenue vs. Year on Year Growth in Tennessee State Tax Revenue (annual, through 2007)



U.S. Unemployment Rate vs. Tennessee Unemployment Rate (monthly, through Jan-10)

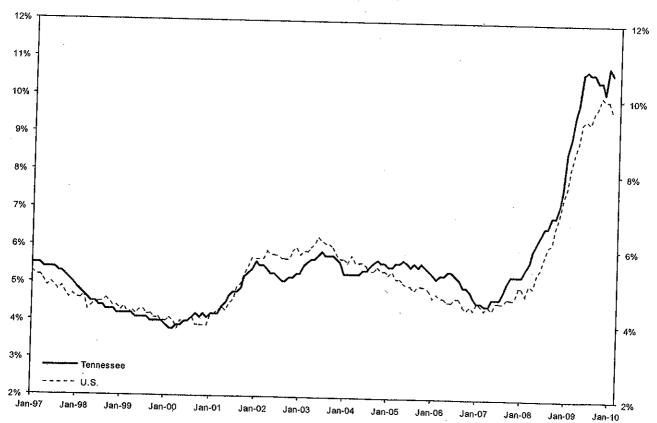


Table 1

Missouriys, Jennessee Various Metrics	14	
	Missouri	Tennessee
Gross State Product (2008, millions)	\$237,797	\$252,127
10-Year Growth (98-08)	44.8%	56.7%
Gross State Product per Capita (2008)	\$39,923	\$40,402
10-Year Growth (98-08)	34.20%	39.89%
Gross State Product per Employee (2008)	\$85,155	\$90,791
10-Year Growth (98-08)	39.12%	48.90%
Personal Income (2008, millions)	\$208,255	\$213,359
10-Year Growth (98-08)	51.3%	59.7%
Personal Income per Capita (2008)	\$34,781	\$33,887
10-Year Growth (98-08)	40.6%	43.0%
Population (2008)	5,956,335	6,240,456
10-Year Growth (98-08)	7.9%	12.0%
Net Domestic Migration (2008-09)	-124	20,605
10-Year Sum as % of Population	0.77%	4.18%
Nonfarm Payroll Employment (2008)	2,792,525	2,777,017
10-Year Growth (98-08)	4.1%	5.3%
Public Employees per 10,000 (2008)	555.19	528.32
Percent of Total State Workforce Unionized (2008)	11.20%	5.50%
Personal Income Tax Rate (state and local)	7.00%	0%
Corporate Income Tax Rate (state and local)	5.81%	6.50%
Sales Tax Rate (state)	4.23%	7.00%
Individual Income Taxes (2007, millions)	\$5,168	\$253
Corporate Taxes (2007, millions)	\$391	\$1,121
State Sales Taxes (2007, millions)*	\$5,020	\$8,454
Property Taxes (2007, millions)	\$5,258	\$4,375
Alcoholic Beverages Taxes (2007, millions)	\$31	\$250
Total Taxes (2007, millions)	\$19,193	\$18,364
10-Year Growth (97-07)	52.38%	72.82%

^{*}Sales tax revenue numbers are state only, whereas other revenue numbers are state and local

Table 2

		To V	st Marginal Persor	nal Income Tax	(PIT) Rates	
		TOTAL ECORORI	c Performance			
					Dan Friday	
		S. Signanii (1981)	E S CHOXALI AVER	a diejanvasa on		
1 0 000/			3333333			and the Violation
		11.0%	17.2%	86.3%	76 50/	405.00
		19.0%				105.39
	106.2%	41.1%				104.89
	53.5%	9.6%				128.79
	77.9%	7.8%				72.4%
	56.7%	12.0%				63.4%
	94.5%					72.8%
0.00%	64.9%					88.3%
0.00%	137.6%					68.2%
			30.776	118.8%	81.8%	161.3%
990094	31.7257/3	\$100 States \$100 S		(3) (1.7)		96.12%
A SERVICE CONTRACTOR					The Colonyalis	7/4 2/09/
	Access May 1			1989-2413 (1)// 15		112 3947
				CANALAN DEGL		
		01/2/25/30 (00/14/17)	VARANCE RADIO		7.7	
	86 % artir (b)					12 10 10 10 10 10 10 10
		1.9%	-2.1%	32.7%	29 19/	50.00/
		4.8%				58.2%
	68.8%	8.7%				57.9%
	59.7%	3.4%				82.4%
	66.6%	3.8%				81.2%
	70.1%					77.6%
	51.2%	4.5%				91.1%
	70.0%					87.7%
11.00%	60.1%	12 99/	40.000			70.6% 58.1%
	0.00% 0.	0.00% 106.8% 0.00% 78.4% 0.00% 106.2% 0.00% 53.5% 0.00% 56.7% 0.00% 56.7% 0.00% 34.5% 0.00% 64.9% 0.00% 137.6% 8.24% 35.2% 8.50% 56.7% 9.30% 68.8% 9.40% 59.7% 10.50% 66.6% 10.55% 70.1% 10.75% 51.2% 11.00% 70.0%	0.00% 106.8% 11.0% 19.0% 0.00% 78.4% 19.0% 106.2% 41.1% 0.00% 53.5% 9.6% 12.0% 0.00% 56.7% 12.0% 0.00% 64.9% 13.8% 0.00% 137.6% 8.6% 137.6% 8.6% 137.6% 8.6% 10.55% 56.7% 4.8% 9.30% 68.8% 8.7% 9.40% 59.7% 3.4% 10.50% 66.6% 3.8% 10.55% 70.1% 10.9% 10.75% 51.2% 4.5% 11.00% 70.0% 59.9% 11.00% 60.1% 13.8% 13.9%	0.00% 106.8% 11.0% 17.2% 0.00% 78.4% 19.0% 17.1% 0.00% 106.2% 41.1% 36.8% 0.00% 53.5% 9.6% 9.7% 0.00% 77.9% 7.8% 14.3% 0.00% 56.7% 12.0% 5.3% 0.00% 94.5% 20.6% 18.7% 0.00% 64.9% 13.8% 14.0% 0.00% 137.6% 8.6% 30.7% 300% 68.8% 8.7% 11.7% 9.40% 59.7% 3.4% 7.4% 10.50% 66.6% 3.8% 6.8% 10.75% 51.2% 4.5% 6.7% 11.00% 70.0% 5.9% 16.6%	0.00% 106.8% 11.0% 17.2% 86.3% 19.0% 17.1% 49.9% 0.00% 106.2% 41.1% 36.8% 46.1% 0.00% 53.5% 9.6% 9.7% 40.0% 0.00% 56.7% 12.0% 5.3% 39.9% 0.00% 56.7% 12.0% 5.3% 39.9% 0.00% 64.9% 13.8% 14.0% 44.9% 0.00% 137.6% 86.6% 30.7% 118.8% 10.00% 137.6% 86.6% 30.7% 118.8% 10.00% 137.6% 86.8% 8.2% 49.5% 9.30% 66.8% 8.7% 11.7% 55.2% 9.30% 66.8% 8.7% 11.7% 55.2% 9.40% 59.7% 3.4% 7.4% 54.4% 10.50% 66.6% 3.8% 6.8% 6.8% 60.5% 10.55% 70.1% 10.9% 10.3% 53.4% 10.00% 70.0% 50.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 12.9% 16.6% 60.5% 11.00% 60.1% 12.9% 12.9% 16.6% 60.5% 11.00% 60.	0.00% 106.8% 11.0% 17.2% 86.3% 76.5% 0.00% 78.4% 19.0% 17.1% 49.9% 52.3% 0.00% 106.2% 41.1% 36.8% 46.1% 50.8% 0.00% 53.5% 9.6% 9.7% 40.0% 40.0% 10.00% 106.2% 12.0% 53.3% 65.0% 55.7% 12.0% 53.3% 39.9% 48.9% 0.00% 77.9% 7.8% 14.3% 65.0% 55.7% 0.00% 13.6% 13.8% 14.3% 65.0% 13.8% 63.8% 0.00% 137.6% 8.6% 30.7% 118.8% 81.8% 100% 137.6% 8.6% 30.7% 118.8% 81.8% 100% 30.0% 56.7% 12.0% 53.3% 30.0% 44.9% 44.5% 13.8% 14.0% 44.9% 44.5% 13.8% 11.0% 55.2% 55.7% 10.0% 137.6% 8.6% 30.7% 118.8% 81.8% 100% 30.0% 56.7% 10.0% 137.6% 8.6% 30.7% 118.8% 81.8% 100% 30.0% 56.7% 48.8% 8.2% 49.5% 44.8% 8.2% 49.5% 44.8% 8.5% 56.0% 56.7% 48.8% 8.2% 49.5% 44.8% 8.3% 56.0% 56.0% 56.0% 38.8% 68.8% 60.5% 56.0% 56.0% 10.55% 70.1% 10.9% 10.3% 53.4% 54.4% 48.6% 10.55% 70.1% 10.9% 10.3% 53.4% 54.4% 54.1% 51.0% 70.0% 59.9% 16.6% 60.5% 45.9% 11.00% 70.0% 59.9% 16.6% 60.5% 60.5% 45.9% 11.00% 60.1% 12.8%

*Highest marginal state and local personal income taxrate imposed as of 7/1/09 using the taxrate of each state's largest city as a proxyfor the local tax. The effect of the deductibility of federal taxes from state tax liability is included where applicable. New Hampshire and Tennessee tax dividend and interest income only.

^{***1997-2007}

Table 3

Personal Inco	me per Capita relativ	e to the U.S.
	Prior to Income Tax	2008
Connecticut	151.43%	141.50%
New Jersey	128.28%	128.10%
Ohio	114.57%	89.33%
Rhode Island	116.66%	103.16%
Pennsylvania	113.47%	101.29%
Maine	94.35%	89.01%
Illinois	133,11%	106.66%
Nebraska	108.01%	94.92%
Michigan	129.97%	88.80%
Indiana	113.84%	85.79%
West Virginia	85.55%	77.56%

Table 4

Gross Sta	te Product relative to	the U.S.
	Rélor/to Incomé Tax	2008
Connecticut	1.74%	1.53%
New Jersey	3.66%	3.35%
Ohio	5.42%	3.33%
Rhode Island	0.44%	0.33%
Pennsylvania	5.72%	3.91%
Maine	0.39%	0.35%
Illinois	6.52%	4.47%
Nebraska	0.67%	0.59%
Michigan	5.08%	2.70%
Indiana	2.61%	1.80%
West Virginia	NA NA	0.44%

Table 7

Tax Revenues as a % of Total U.S. (state)						
	Prior to income Tax	2007				
Connecticut	1.72%	1.70%				
New Jersey	3.62%	3.90%				
Ohio	4.12%	3.43%				
Rhode Island	0.45%	0.37%				
Pennsylvania	5.38%	4.07%				
Maine	0.43%	0.47%				
Illinois	5.28%	3.97%				
Nebraska	0.60%	0.54%				
Michigan	4.75%	3.15%				
Indiana	2.27%	1.85%				
West Virginia	0.77%	0.61%				

Table 5

7	Volume			
Stare	NO PARAMETER STATE OF THE STATE	en/Car/Percent Change in State and L	opalitax Revenue by Major Tax	
0.00	henge from Julioz through the ne	Carporatalinonia (1977) Change from Util Orderrough, Junios Calul Osamongh Junios	and a Saltedition of the sales	PAST VERY CONTINUES.
	To us 68 enroughtum og	COURDER TO A COURT OF THE COURT	Egyande tromasiliosurus delicipus qu	Change work United through June
Vianatiral	-6.03%	-6.80%		to Juli 08 through Juni 09
Alaska	NA .	-51.11%	-5.24% NA	-3.77%
Arizona	-27.99%	-24.52%	-15.39%	-35,35%
Arkansas	-4.52%	1.08%	-1.49%	-15.41%
California	-20.24%	21.09%	-8.83%	-0.92%
Colorado Connecticut	-13.07%	-35,41%	-8.14%	-10.75%
Delaw are	-15.01%	-26.95%	-7.21%	-9.46% -11.58%
Florida	-9,55% NA	-32.40%	NA	-9.03%
Georgia	-12.24%	-16.95%	-8.29%	-9.31%
Haw ali	-13.34%	-26.34%	-7.02%	11.30%
Idaho	-18.28%	-25.35%	-6.03%	-8.45%
Illinois	-11.02%	-25.21%	-10,48%	-13.14%
Indiana	-10.83%	-11.66% -7.75%	-5.86%	-7.18%
lówa	-4.95%	-7.75% -28.48%	8.13%	-1.47%
Kansas	-7.24%	-29,76%	16.53%	0.17%
Kentucky	-4.82%	-26,98%	-1.66%	-7.15%
Louisiana	-7.43%	-23.87%	-0.70%	-2.04%
Maine	-13.84%	-22.45%	-4.69%	-6.93%
Maryland	-12.37%	1.86%	-4.54% 2.73%	-8.29%
Massachusetts	-16.52%	-17.91%	-5.32%	-4.74%
Michigan	-10.73%	-56.84%	14.73%	-12.21%
Minnesota	-10.66%	-25.13%	-3.86%	-2.63%
Mississippi Missouri	-4.22%	-15.68%	-3,47%	-6.33% -3.77%
Montana	-6.78%	-27.43%	-6.13%	-5.77% -5.65%
Nebraska	-4.93%	1.57%	. NA	-2.06%
Nevada	-7.19% NA	-14.78%	-1.95%	-5.92%
lew Hampshire*	-16.47%	NA .	-12.78%	-3.86%
New Jersey	-15.40%	-19.57%	NA	-8.21%
New Mexico	-41.81%	-14.98%	-8.15%	-11.20%
New York	-15.34%	-27.25%	-2.15%	-9.76%
North Carolina	-13.04%	-3.03% -25.27%	-4.61%	-10.31%
North Dakota	16.65%	-19.86%	-5.82%	-10.03%
Ohio	-12.72%	-26.20%	14.54%	4.44%
Oklahoma	-9.05%	-4.88%	-6.68%	-7.14%
Oregon	9.38%	-45.76%	3.33% NA	-4.16%
Pennsylvania	-8.25%	-20.74%	-4.25%	2.62%
Rhode Island	-11.98%	-25,62%	-3.82%	-6.61%
South Carolina	-16.40%	-25.39%	-9.92%	-6.80%
South Dakota	NA .	-30.21%	3.30%	-11.66%
Tennessee* Texas	-23.82%	-18.85%	-6.81%	0.90% -8.44%
Utah	NA 10 55%	NA [1.00%	-0.44% -4.32%
Vermont	-10.55% -14.46%	-37.69%	-11.21%	-4.32%
Virginia	-14.46% -9.10%	2.33%	-5.09%	-1.79%
Washington	-9.10% NA	-19.53%	-5.56%	-10.08%
West Virginia	2.55%	NA St SSS	-8.10%	-6.49%
Wisconsin	-3.78%	-21.96%	0.02%	-1.90%
Wyoming	NA .	-27.06%	-4.24%	-2.84%
• -		NA '	-4.24%	-2.84%
U.S.**	-13.37%	-11.70%	4.000	
l l		/0	-4.63%	-8.09%

^{**}Total tax revenues for all states not including Washington D.C.

.

The Missouri Compromise

We structure our discussion this year largely around the state of Missouri. As unlikely as it may seem the slightly overweight, middle-aged, middle-income, mid-Western state of Missouri is pushing the envelope on its way toward radical tax reform. Instigated by the state's Show-Me Institute and its founder, Rex Sinquefield, a tax-swap proposal to eliminate both the state's personal income tax and corporate income tax in favor of a static revenue neutral sales tax increase is edging ever-closer to becoming a constitutional amendment.

Only one state—Alaska in 19 80—has actually removed its progressive income tax. For Alaska the decision to eliminate the state's income tax was relatively easy to make given the huge new revenues coming from the state's severance tax on oil during the boom years in oil prices in the early 1980s. Replacing a state's income tax by levying a tax on the other 49 states is a political no-brainer. For Missouri, however, there is no such easy answer. Missouri doesn't have a relatively painless tax it can levy to offset elimination of the personal and corporate income taxes. But even though Missouri's tax reform is far from a no-brainer, the benefits from reform could be enormous if the process is administered well and the constitutional amendment is carefully crafted.

A. Summary and Conclusions

The way we are viewing the tax swap issue facing Missouri is to first see what the potential downside really is. Tennessee is quite similar to Missouri in its basic economic profile. Tennessee, however, already has a tax structure very similar to the one that Missouri would adopt with the tax swap. And, Tennessee is doing quite a bit better than Missouri. As a result, it's hard to argue that Missouri is facing an undue risk by adopting the tax swap.

Secondly, without significant expected benefits, even if there were no downside risk, it still wouldn't make much sense to go through all the effort to achieve a tax swap for Missouri. To assess the potential benefits for Missouri, we have compared the nine states with no personal income tax to the nine states

with the highest personal income tax rates. The differences in economic performance between the two groups over the past decade are astounding, illustrating that a tax swap could be a huge benefit for the citizens of Missouri.

A third way to gauge the benefits of a tax swap for Missouri is to look at the economic consequences that have befallen the eleven states that have adopted personal income taxes over the past 50 years. To a state, each of the states that has initiated a progressive income tax has caused a deterioration in that state's economic performance over the ensuing years. For several of those states that have put in a progressive state income tax, the economic deterioration has been catastrophic. Given that Missouri wishes to do the opposite of the eleven states that adopted a state income tax by abolishing the income tax in favor of a sales tax, Missouri citizens should expect a significant improvement in their economic lot in life based on the time series data of states that have initiated an income tax.

A fourth consideration of a tax swap for Missouri is the expected consequences such a swap would have on overall state tax receipts. Here, the results are as clear as they can be. The nine highest tax rate states' tax revenue growth is substantially less than the tax revenue growth in the zero income tax rate states. In addition, Tennessee's tax revenue growth exceeds Missouri's tax revenue growth. And finally, states that have put in a progressive income tax where none had previously existed have way underperformed the nation in tax revenue growth. If Missouri wishes to have fiscal solvency, the tax swap route is the way to go.

The fifth consideration for Missouri is closely related to the trend of fiscal solvency and has to do with the volatility of state tax receipts. Once again, state sales tax receipts are far less volatile than are state income tax receipts. With a tax swap, Missouri would benefit significantly by having a more stabile tax revenue stream.

The sixth section of this paper which has been provided to us by Professor Joseph Haslag of the University of Missouri lays out the locus of sales tax rates and the size of the sales tax base that would allow Missouri to effectuate the tax swap. The locus of points is feasible.

B. Missouri: The State

The Show-Me State is a state fairly representative of the nation as a whole. The former border state—slave state that sided with the Union—is centrally located within the continental United States, has a mix of Northern, Midwestern, and Southern neighbors, and has a mix of urban and rural areas within the state. The land making up present-day Missouri was purchased from France as part of the Louisiana Purchase and eventually admitted into the Union as the 24th state in 1821. Missouri, with a population of about 6 million people, is now the 18th most populous state, and the 21st largest state by area, encompassing 69,704 square miles. Missouri also has a state population density (86.9 people per square mile) closer to the national average (86.8) than any other state.

The state has become something of a bellwether politically, with Missouri residents having voted for the president-elect in all but two elections since 1904. Currently, the state's elected representatives are as evenly split as possible with one Republican and one Democratic senator, five Republican and four Democratic House members, a Democratic governor, and a Republican lieutenant governor.

Economically, Missouri had a gross state product in 2008 of \$238 billion, or about 1.7% of the nation's gross domestic product. That works out to per capita personal income of \$36,631, which ranked 29th in the nation. The economy is varied, with Missouri home to the 2nd largest number of farms in the U.S., and mining, manufacturing, tourism, services, and a number of other industries contributing to the state's output.

Income from the earnings of those professional pursuits is taxed in ten different earnings brackets at the personal level, with marginal personal income tax rates ranging from 1.5% to 6.0%—7.0% with local

Kansas City income tax rates added-on. The state sales tax rate is 4.225% (9.35% with local add-ons in Kansas City), and the state's maximum statutory corporate income tax rate is 6.25%, which becomes 5.81% after federal deductibility and local levies are taken into account. The state does not levy an estate tax. The minimum wage in Missouri is the federal minimum wage of \$7.25, and the state is not a right to work state.

And, as a personal note, I, Arthur Laffer, have a special fondness for St. Louis, Missouri, which has erected the world's largest Laffer curve, which local inhabitants call their Arch.

C. The Proposal

While not complete at present, a summary of Missouri's contemplated tax reform is very similar to the summary of Missouri Senate Bill SJR 29, included below:

SJR 29 - Upon voter approval, this proposed constitutional amendment replaces the state individual and corporate income tax, the corporate and bank franchise tax and state sales and use tax with a tax on the sale, use, or consumption of new tangible personal property and taxable services equal to five and eleven-one hundredths percent beginning January 1, 2012. Component parts or ingredients of a new tangible personal property to be sold at retail, federal government purchases, and business-to-business transactions including agriculture will be exempt from the new tax while all other exemptions and tax credits will be eliminated. The enactment of any new exemptions will require a two-thirds affirmative vote by the General Assembly and approval by the Governor. The conservation sales tax, the soil and parks sales tax, and local sales taxes will be recalculated to produce substantially the same amount of revenue.

Each qualified family will receive a sales tax rebate based on the federal poverty level guidelines to offset the sales tax on basic necessities.

The Tax Adjustment Commission is created to recommend a one-time adjustment to the new sales tax rate to ensure revenue-neutrality. A rate adjustment may only be recommended to the General Assembly upon a unanimous vote of the Commission. A concurrent resolution, offered in the house of representatives, must be adopted by both houses and sent to the Governor in order to make the one-time rate adjustment recommended by the Commission.

This act is identical to HJR 56 (2010).1

D. Is Such a Reform Even Feasible: The Downside Risk: Missouri and Tennessee

¹ Missouri State Senate: Government Accountability and Fiscal Oversight Committee, "SJR 29: Replaces All Taxes on Income with a Sales and Use Tax", 95th General Assembly, Second Regular Session, January 12, 2010.

The old phrase "how can we do that?" is ever so *apropos* for the Missouri tax reform decision. At present Missouri collects 68% of its state revenues from its income taxes and the state exists and functions, whether its current fiscal system is ideal or not. While an underachiever, Missouri is by no means the worst performing state in the nation and is far from being in a desperate situation where something has to be done. If you'll forgive a backhanded compliment, Missouri is not California. In fact, we ranked Missouri 14th out of the 50 states in the 2010 ALEC-Laffer State Economic Competitiveness Index. Missouri's decision whether to enact serious tax reform is not one forced on it by necessity, but one of choosing to improve the current system. And whenever changes are made out of choice, not necessity, the old Latin phrase "*Primum non nocere*" (first do no harm) applies. Proof that there is minimal risk of doing harm is this reform's first serious hurdle. Why should we fix something if "it ain't broke"? What's the downside?

Just from the numbers alone Missouri and Tennessee have a lot in common. The most significant difference between the two states is how each state's government chooses to collect its revenues. If Missouri's tax reform were to be enacted, Missouri would look a lot like Tennessee. Today, Tennessee has no broad personal income tax (à la the tax reform proposal for Missouri) but does have a corporate income tax which would be eliminated in Missouri. Tennessee also has lower property taxes than Missouri, and derives the bulk of its revenues from a broad-based sales tax (again à la the tax reform proposal for Missouri) with intra-state and local sales tax rates in the range of 9+%. In short, if Missouri were to enact their tax reform constitutional amendment, they would transform their political economy into something very similar to Tennessee's current political economy. And, Tennessee's current political economy really does work. In fact, from the metrics, Tennessee's fiscal system works quite a bit better than does Missouri's fiscal system. In the table below, we have listed some of the key metrics for both Missouri and Tennessee.

Table 1

Table I	omiconomic distinction of the	
Miseourijys Tennessee Valious Metrics		
* Sym Syderonametries	Missouri	Tennessee
Gross State Product (2008, millions)	\$237,797	\$252,127
10-Year Growth (98-08)	44.8%	56.7%
Gross State Product per Capita (2008)	\$39,923	\$40,402
10-Year Growth (98-08)	34.20%	39.89%
Gross State Product per Employee (2008)	\$85,155	\$90,791
10-Year Growth (98-08)	39.12%	48.90%
Personal Income (2008, millions)	\$208,255	\$213,359
10-Year Growth (98-08)	51.3%	59.7%
Personal Income per Capita (2008)	\$34,781	\$33,887
10-Year Growth (98-08)	40.6%	43.0%
Population (2008)	5,956,335	6,240,456
10-Year Growth (98-08)	7.9%	12.0%
Net Domestic Migration (2008-09)	-124	20,605
10-Year Sum as % of Population	0.77%	4.18%
Nonfarm Payroll Employment (2008)	2,792,525	2,777,017
10-Year Growth (98-08)	4.1%	5.3%
Public Employees per 10,000 (2008)	555.19	528.32
Percent of Total State Workforce Unionized (2008)	11.20%	5.50%
Personal Income Tax Rate (state and local)	7.00%	0%
Corporate Income Tax Rate (state and local)	5.81%	
Sales Tax Rate (state)	4.23%	1
Individual Income Taxes (2007, millions)	\$5,168	1
Corporate Taxes (2007, millions)	\$391	1
State Sales Taxes (2007, millions)*	\$5,020	
Property Taxes (2007, millions)	\$5,258	
Alcoholic Beverages Taxes (2007, millions)	\$31	ľ
Total Taxes (2007, millions)	\$19,193	1
10-Year Growth (97-07)	52.38%	72.82%

^{*}Sales tax revenue numbers are state only, whereas other revenue numbers are state and local

In 2008 Tennessee had a gross state product \$15 billion higher than Missouri's gross state product and that difference is increasing rapidly. Tennessee has recently passed Missouri in GSP per capita and is far ahead of Missouri in GSP per employee. Tennessee is also attracting lots of people from the rest of the nation while Missouri is a little better than even in net domestic in-migration over the past decade.

Tennessee's tax receipts are slightly less than Missouri's but are growing quite a bit faster. In fact, over the past decade Tennessee's total tax receipts have risen a lot faster than has Tennessee's GSP while Missouri's tax receipts growth has only slightly exceeded Missouri's GSP growth. So much for an income tax solving a state's budget problems.

Table 1 shows, from a 30,000 foot perspective, that Missouri's reform proposal can work. There exists a real life example where a tax policy very similar to Missouri's proposed system does work—Tennessee. Tennessee as a state is quite similar to Missouri, and Tennessee's tax/fiscal structure is quite similar to the tax/fiscal structure being proposed for Missouri. In addition, Tennessee has performed far better than has Missouri without any major advantages such as special taxes on oil, gambling, or what-have-you. If Missouri did nothing other than exactly copy the tax structure of Tennessee, they could virtually eliminate any chance of a major downside contingency.

The first question of what's the downside is fairly easy to answer—not much.

E. A Cross-State Time Series Comparison of States without an Income Tax with those States with the Highest Income Tax Rates

The entire case to be made for Missouri's tax reform has to hinge on improving the overall performance of Missouri's economy. Because Missouri's proposed tax reform would remove all income taxes in favor of higher sales taxes (in Missouri both the state sales tax rate and sales tax base would most likely increase), the first evidence to be marshaled for or against Missouri's tax reform is a comparison of those states without broad-based income taxes (as would be the case if the tax reform proposal were implemented) with those states that have the highest rates on broad based income taxes (as is the current case in Missouri).

In the table below, Table 2, we have listed all nine states that do not have a broad based income tax, the U.S. state average, Missouri, and the nine states with the highest state marginal personal income tax rates. For each of these states and the U.S. average of all states we have columns for the current i) Top Marginal Personal Income Tax Rate and, ii) Gross State Product Growth, iii) Population Growth, iv) Nonfarm Payroll Employment Growth, v) Gross State Product Per Capita Growth, vi) Gross State Product Per Employee Growth, and vii) Growth of Total State Tax Receipts, all for the ten year period 1998-2008.

Table 2

			l able 2				
The N	line States	with the Low	est and the Highe Ten-Year Econom	st Marginal Persor	nal Income Tax	(PIT) Rates	
				2008 unless otherwise is:	400		
\$65 KIND CONTON SOBJECT OF THE SECTION OF	BSGEORTZO: TU	ipertorin Biological Personal	rande between 1996 and Se estas Se estas estas es	5009 miles à emergant de	rtett 1935 - Artist III - 1931		
					MARKET EXAMPLE	Mark Comment	1.00.000
	Participal Control	2745375275902941			Sec. District	No manifest &	1311111
						CANALITY (C. CANA	
				g Gregory			TO NAME OF
	SCORE						
Alaska	0.00%	106.8%	11.0%	17.2%	86.3%	76.5%	105.3%
Florida	0.00%	78.4%	19.0%	17.1%	49.9%	52.3%	104.8%
Nevada	0.00%	106.2%	41.1%	36.8%	46.1%	50.8%	128.7%
New Hampshire	0.00%	53.5%	9.6%	9.7%	40.0%	40.0%	72.4%
South Dakota	0.00%	77.9%	7.8%	14.3%	65.0%	55.7%	63.4%
Tennessee	0.00%	56.7%	12.0%	5.3%	39.9%	48.9%	72.8%
Texas	0.00%	94.5%	20.6%	18.7%	61.3%	63.8%	88.3%
Washington	0.00%	64.9%	13.8%	14.0%	44.9%	44.5%	68.2%
Wyoming	0.00%	137.6%	8.6%	30.7%	118.8%	81.8%	161.3%
TYY OTTERING	0.0070		, .,		· · · · · · · · · · · · · · · · · · ·		
e en la constitución de la const	SSSS IN MESA	86.28%	1676	10-20%	61 3676	676 376	96,12%
	1.76			14 Marie 18 18 18 18 18 18 18 18 18 18 18 18 18			
PHER TOTAL						1 Sept 10 10 10 10 10 10 10 10 10 10 10 10 10	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Misselli			W. 1845, 77: 974		87 S 19167	12 (0.0 (0.0 (V) A)	G228189/s
						1312 9875 073	6.0000000000000000000000000000000000000
essa any dinadenta	4 / 1/2 /	(0.77)			0.576	175 5 8 20 21 17	70.86%
Mercellin Ballace					Sales Western		
110001100000000000000000000000000000000							
Ohio	8.24%	35.2%	. 1.9%	-2.1%	32.7%	38.1%	58.2%
Maine	8.50%	56.7%	4.8%	8.2%	49.5%	44.8%	57.9%
Maryland	9.30%	68.8%	8.7%	11.7%	55.2%	51.0%	82.4%
Vermont	9.40%	59.7%	3.4%	7.4%	54.4%	48.6%	81.2%
New York	10.50%	66,6%	3.8%		60.5%	56.0%	77.6%
California	10.55%	70.1%	10.9%	10.3%	53.4%	54.1%	91.1%
New Jersey	10.75%	51.2%	4.5%	6.7%	44.6%	41.6%	
Haw aii	11.00%	70.0%	5.9%	16.6%	60.5%	45.9%	70.6%
Oregon	11.00%	60.1%	12.8%		41.8%	45.2%	58.1%
T0-"	1						

^{*}Highest marginal state and local personal income tax rate imposed as of 7/409 using the tax rate of each state's largest city as a proxy for the local tax. The effect of the deductibility of federal taxes from state tax liability is included where applicable. New Hampshire and Tennessee tax dividend and interest income only.

The numbers in the table above are truly striking. Over the past decade, for total gross state product (GSP) growth, the zero personal income tax rate states have on average outperformed those states with the highest personal income tax rates by 26.5% over the past decade, and have outperformed the U.S. average by 20%. The nine states without a personal income tax also outperformed Missouri by a whopping 41 ½%.

For a state like Missouri, which had a 45% gross state product (GSP) growth over the past decade, each additional 10% in growth would add an additional \$24 billion to gross state product over the coming

[&]quot;Equal-weighted averages

^{***1997-2007}

decade. Just catching up to the national average in growth would add \$50 billion to Missouri's gross state product, while catching up to the no tax states would add \$100 billion to Missouri's gross state product. That's a lot of money.

Now quite a bit of the extra growth in average gross state product between the highest and the lowest income tax rate states comes from higher population growth and higher employment growth. And here again Missouri has been trailing the rest of our sample by a significant amount.

For those states with no personal income taxes, average population growth over the past decade was about 15.95%, or 9.6 percentage points higher than the average of those nine states with the highest personal income tax rates, and almost 6 percentage points higher than the U.S. average and 8+ percentage points higher than Missouri. And, with respect to the ten-year growth of non-farm payroll employment, the average difference between the zero and highest tax rate states was a similar 9.76 percentage points higher (18.2% versus 8.44%). For the no tax states versus the U.S. average, the difference was almost 8 percentage points and 14+ percentage points for the difference between the zero tax states and Missouri. Missouri is in terrible shape. Change is needed. If Missouri could make itself one of the no income tax states they would be in much better economic shape.

Combining gross state product (GSP) growth with population growth and employment growth yields respectively the critical standard of living and productivity metrics of growth in gross state product (GSP) per capita and gross state product (GSP) per worker. For those states with no personal income taxes, average GSP per capita growth over the past decade was about 61.36%, or 11.07 percentage points higher than the average of those nine states with the highest personal income tax rates, 9.97 percentage points higher than the U.S. average, and an unbelievable 27.16 percentage points higher than Missouri. Missouri's relative performance is awful.

If Missouri had just caught up with the average of the no tax states over the past decade, the average Missouri resident's income would be more than \$12,000 higher. That is amazing. Taxes really do matter.

And, for growth in GSP per employee, the average differences were slightly less, but still a significant 9.86 percentage points higher (57.13% versus 47.27%) for the no tax states versus the highest personal income tax rate states, 16.73 percentage points for the U.S. average and 18.01 percentage points for Missouri. Yikes!

Given the data at hand, it is hard to imagine any more conclusive results from a cross-section time series of states that could be obtained in favor of Missouri's tax proposal. Missouri needs help badly, and from the looks of it a switch out of income taxes to broad-based sales taxes is exactly what the doctor ordered.

F. States That Have Put In an Income Tax

The previous section compared the economic performance of the nine states with no personal income tax to the nine highest income tax rate states. While the results were as robust and conclusive as could be imagined there still are a number of lingering concerns. For example, each state in the U.S. has its own unique characteristics and even when characteristics are shared with a few other states it is difficult to disentangle exactly what has caused what. One could question the reliability of our previous section's comparison of the nine zero income tax states with the highest income tax rate states because of possible differences in the two groups of states. This section narrows the focus by providing a before and after comparison of states that have actually put in a state income tax. The states are the same states before and after save for the fact that a state income tax was adopted.

At various times over the past 50 years eleven states have adopted a progressive state income tax where none before existed. This section focuses on what the consequences have been for those states that have actually put in an income tax. In this way we can control for variations across states, which was not possible in the previous sections. This time series cross-section analysis should help Missouri make a reasoned choice if in fact there is a noticeable effect on a state's prosperity when it puts in an income tax. The logic is that taking away an income tax will have the opposite effect of putting an income tax in.

The eleven states where income taxes were adopted from most recent to least recent are: Connecticut (1991), New Jersey (1976), Ohio (1972), Rhode Island (1971), Pennsylvania (1971), Maine (1969), Illinois (1969), Nebraska (1968), Michigan (1967), Indiana (1964), and West Virginia (1962).

In Appendix A, are listed growth rates of Gross State Product (GSP) were the five years prior to putting in the income tax and then in five year intervals for the 15 years following the date of inception of the state's income tax for each of the above 11 states. The first and other odd columns are growth in GSP over the five year periods and alternating even columns are compound annual growth rates (CAGR) of the proceeding column. Also at the very end of row i.) is listed the state's initial highest personal income tax rate and what the highest tax rate is now. In the next row ii.) the odd columns are the state's GSP percentage of total U.S. gross state product for the dates listed above and in parentheses annual total U.S. gross state product growth for the preceding 5 years. For the next three rows, rows iii.), iv.) and v.) the same comparisons are provided only for personal income (PI) per capita relative to U.S. personal income per capita, population as a percentage of U.S. total population and for state and local tax revenues as % of total U.S. state and local tax revenues.

What we find absolutely astonishing is how the size of the economy of each of these 11 states as a share of the total U.S. economy (row ii. Appendix A) has fallen subsequent to introducing an income tax. Some of the declines are quite large. Connecticut for example went from 1.74% of U.S. GSP in the 1986-1990 period to 1.53% in 2008. New Jersey fell from 3.66% of U.S. GSP in the 1971-75 period to 3.35% in 2008. From 1967 to 1971 Ohio was 5.42% of total U.S. GSP yet in 2008 it was only 3.33%. Rhode Island and Pennsylvania respectively went from 0.44% and 5.72% of the U.S. in the 1966-70 period to 0.33% and 3.91% in 2008. Maine's and Illinois' pre-tax period was 1964-68 and they dropped respectively from 0.39% and 6.52% of the total U.S. GSP to 0.35% and 4.77% in 2008. Nebraska for 1963-67 was 0.67% of the U.S. GSP and 0.59% in 2008. And lastly our beloved Michigan which seems never to get a break went from 5.08% in the 1962-1966 period to 2.70% in 2008. Leaping Lizards!

And then there's the critical measures of the change in a state's gross state product and personal income per capita relative to the U.S. as a whole (Table 3 and Table 4). Personal income per capita is the closest measure to be found that represents the state's standard of living and gross state product is the truest measure of a state's output.

Table 3

	I able 2						
Personal income per Capita relative to the U.S.							
	Prior to Income Tax	2008					
Connecticut	151.43%	141.50%					
New Jersey	128.28%	128.10%					
Ohio	114.57%	89.33%					
Rhode Island	116.66%	103.16%					
Pennsylvania	113.47%	101.29%					
Maine	94.35%	89.01%					
lilinois	133.11%	106.66%					
Nebraska	108.01%	94.92%					
Michigan	129.97%	88.80%					
Indiana	113.84%	85.79%					
West Virginia	85.55%	77.56%					

Just look at the declines in personal income per capita relative to the overall U.S. It's more than depressing; it's an absolute tragedy when you realize just how much opportunity the citizens of these eleven states have lost following their adoption of a progressive income tax. On a human level it's appalling.

Table 4

Gross State Productive lative to the U.S.							
	Prior to Income Tax	2008					
Connecticut	1.74%	1.53%					
New Jersey	3.66%	3.35%					
Ohio	5.42%	3.33%					
Rhode Island	0.44%	0.33%					
Pennsylvania	5.72%	3.91%					
Maine	0.39%	0.35%					
Illinois	6.52%	4.47%					
Nebraska	0.67%	0.59%					
Michigan	5.08%	2.70%					
Indiana	2.61%	1.80%					
West Virginia	NA .	0.44%					

Declines in gross state product relative to the overall U.S. tell the same sad story as the loss in personal income per capita relative to the U.S. Lower output means fewer jobs, less goods produced and a diminished capacity for prosperity and wealth generation. Slower growth should never be the goal of any jurisdiction, and it's clear that a progressive income tax has a decidedly negative impact on growth.

The income experiments for each and every state that has instituted a personal income tax has been an abject failure. In each case the state's economy has become a smaller portion of the overall U.S. economy and the state's citizens have had their standards of living dramatically reduced. Based on these results, eliminating the income tax will improve a state's lot in life and Missouri needs a lift.

G. Tax Revenues and a Quick Trip Back in Time to Delaware

As an anecdote of what is possible with tax cuts, we would like to point out the experience Delaware had with total state tax revenues when Delaware drastically cut income tax rates. While Delaware isn't part of our usual set of states with which we are comparing Missouri, the Delaware experience has lots to do with good state economic policy and especially with respect to what Missouri is considering. Back in 1978 Arthur Laffer was integrally involved with tax reform in Delaware when Pete DuPont was Delaware's governor. He sought to reduce the state's incredibly high highest marginal income tax rate, which at the time was 19.8%. As it so happens Governor DuPont was successful beyond anyone's wildest imagination and the top rate fell from 19.8% in 1978 to a 6.9% in 1998—the rate is currently 5.95%. When Governor DuPont proposed his tax rate reduction plan he was met with a chorus of criticism much of which was centered on the loss of tax revenues and the dire consequences the revenue shortfall would have on the state's ability to help the poor, minorities and the disadvantaged. He persevered, however, following in the footsteps of President John F. Kennedy and President Kennedy's famous quote that the best form of welfare is still a good high-paying job. And now we know what actually happened. The Delaware Laffer Curve figure reproduced below says it all.

Delaware's Rate Cuts Enhanced State Revenues \$900 25% \$800 20% \$700 Highest Personal Income Tax Rate \$600 Individual Income Tax Revenue Tax Revenues (millions) \$500 \$400 \$300 Top PIT \$200 5% \$100

Figure 1

Even when we compared Missouri over the past decade with the no-income tax state of Tennessee (Table 1) the path of total tax receipts dramatically favored Tennessee. From 1998 through 2008 Tennessee's total tax revenues grew by 72.8% versus Missouri's 52.4%. If the existence of an income tax doesn't even provide more revenues, it doesn't do any good.

1987

Years

1989

1991

1993

1995

1997

\$0

1977

1979

1981

1983

1985

We have also provided a detailed comparison of the nine no-income tax states with the nine highest income tax rate states (Table 2). The last column of Table 2 looks at total state tax receipts growth over the past decade. Average growth of tax receipts for the no-income tax states exceeded the average growth of tax receipts for the highest income tax rate states and the U.S. average by about 22% over the past decade. Zero income tax rate states' total tax revenues grew by 40% more than Missouri's tax receipts grew—(96.12% vs. 52.38%).

Zero income tax states outperform in every conceivable fashion their higher taxed brethren and have more tax revenues. Go Figure!

Finally, Tables 6 and 7 ldok at state and localitax revenues as a % of total U.S. tax revenues and state tax revenues as a % of total U.S. accordingly, in the eleven states that have adopted a state income tax over the last 50 years. Thin the eleven states that have added an income tax the percentage of total U.S. tax revenue in 2007 has fallent relative to where it was prior to ladoption. With Michigan's share of U.S. tax revenue falling precipitously, from 4.69%, prior to implementing an income tax to 2.94% in 2007.

Table 6

Tax Revenues as al % of Total U.S. (state and local)							
	Prior to Income Tax	2007					
Connecticut	1.72%	1.65%					
New Jersey	3.80%	4.03%					
Ohio	4.25%	3.61%					
Rhode Island	0.45%	0.38%					
Pennsylvania	5.30%	4.10%					
Maine	0.43%	0.44%					
Illinois	5.49%	4.32%					
Nebraska	0.65%	0.56%					
Michigan	4.69%	2.91%					
Indiana	2.30%	1.66%					
West Virginia	0.72%	0.48%					

Table 7

Tax Revenues as a % of Total U.S. (state)							
	Prior to income Tax	2007					
Connecticut	1.72%	1.70%					
New Jersey	3.62%	3.90%					
Ohio	4.12%	3.43%					
Rhode Island	0.45%	0.37%					
Pennsylvania	5.38%	4.07%					
Maine	0.43%	0.47%					
Illinois	5.28%	3.97%					
Nebraska	0.60%	0.54%					
Michigaņ	4.75%	3.15%					
Indiana	2.27%	1.85%					
West Virginia	0.77%	0.61%					

H. The Stability of Tax Receipts

In the previous sections of this study we have focused extensively on measures of state prosperity and to a lesser extent on overall tax receipts. But another major issue that state and local governments face has to do with the stability of tax receipts. When tax receipts are volatile that usually means a shortfall of revenues when times are tough and spending needs are the greatest, and excess revenues when times are good and some government spending is superfluous. Revenue fluctuations move exactly counter to government spending needs.

State and local governments spend too much during good times on marginal projects solely because they can. And then when bad times come they are forced to raise taxes and/or cut back on desperately needed projects. Volatility of revenues and spending needs is anathema to good governance. Therefore, for a state to function efficiently it is better to have less volatile revenues.

The table below, Table 5, reproduces from "The State Revenue Report" of the Rockefeller Institute, with slightly updated date, the annual percent change in the year over year numbers ending in June '09 versus June '08 for each state's personal income tax (PIT), corporate income tax (CIT), sales tax and total tax revenues.

Table 5

	TELEFORETE BESTELLE STEEL DE	er Veat/Parcent Charge in State and L	oralitex Revenue by Majortax	ng ang the contract of the second second second
State				I POR AS TO SET PROPERTY.
	Change Forecall (7) through sun as	Orango (Com Unio Antional Unio)	in () Sales intonte Tass On (ma vienes missa) o7 (presignation los	Change (com. III. (7) the grade flue as
	12 12 14 14 14 14 14 15 16 14 14 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	te dust stuckien drings	see a to Juli 08 through Juli 109	🔊 ะ เรื่องขึ้นเดิม (เกือนที่กับนักเดิม 🥙
Alabama	-6.03%	-6.80%	-5.24%	-3.77%
Alaska		-51.11%	NA NA	-35,35%
Arizona		-24.52%	-15.39%	-15.41%
Arkansas		1.08%	-1.49%	-0.92%
California		21,09%	-8.83%	-10.75%
Colorado	1	-35.41%	-8.14%	-9.46%
Connecticut Delaw are		-26.95%	-7.21%	-11.58%
Florida		-32.40%	NA.	-9.03%
Georgia	1	-16.95% -26.34%	-8.29%	-9.31%
Haw ali	1	-26.34% -25.35%	-7.02%	-11.30%
Idaho	1 11	-25.21%	-6.03%	-8.45%
Illinois	-11.02%	-11.66%	-10.48% -5.86%	-13.14%
Indiana		-7.75%	8.13%	-7.18% -1.47%
low a		-28.48%	16.53%	0.17%
Kansas	-7.24%	-29.76%	-1.66%	-7.15%
Kentucky	-4.82%	-26,98%	-0.70%	-2.04%
Louisiana	-7.43%	-23.87%	-4.69%	-6.93%
Maine	-13.84%	-22.45%	-4.54%	-8.29%
Maryland	-12.37%	1.86%	2.73%	-4.74%
Massachusetts	-16.52%	-17.91%	-5.32%	-12.21%
Michigan	-10.73%	-56.84%	14.73%	-2.63%
Minnesota	-10,66%	-25.13%	-3,86%	-6,33%
Mississippi	-4.22%	-15.68%	-3.47%	-3,77%
Missouri	-6.78%	-27.43%	-6.13%	-5.65%
Montana	-4.93%	1.57%	NA.	-2.06%
Nebraska	-7.19%	-14.78%	-1.95%	-5.92%
Nevada	NA A A Track	NA	-12.78%	-3.86%
New Hampshire*	-16.47%	-19.57%	NA NA	-8.21% .
New Jersey	-15.40%	-14.98%	-8.15%	-11.20%
New Mexico New York	-41,81%	-27.25%	-2,15%	-9.76%
North Carolina	-15.34% -13.04%	-3.03%	-4.61%	-10.31%
North Dakota	16.65%	-25.27% -19.86%	-5.82%	-10.03%
Ohio	-12.72%	-26.20%	14.54%	4.44%
Oklahoma	-9.05%	-4.88%	-6.68% 3.33%	-7.14%
Oregon	9.38%	-45.76%	3.33% NA	-4.16% 2.62%
Pennsylvania	-8.25%	-20.74%	-4,25%	-6. 6 1%
Rhode Island	-11,98%	-25.62%	-3.82%	-6.80%
South Carolina	-16.40%	-25.39%	-9.92%	-11.66%
South Dakota	NA .	-30.21%	3,30%	0.90%
Tennessee*	-23.82%	-18.85%	-6.81%	-8.44%
Texas	NA	NA	1.00%	-4.32%
Utah	-10,55%	-37.69%	-11.21%	-11.36%
Vermont	-14.46%	2.33%	-5.09%	-1.79%
Virginia	-9.10%	-19.53%	-5.56%	-10.08%
Washington	N A	NA	-8.10%	-6.49%
West Virginia	2.55%	-21.96%	0.02%	-1,90%
Wisconsin	-3.78%	-27.06%	-4.24%	-2.84%
Wyoming	NA .	NA .	-4.24%	-2.84%
U.S.**	-13.37%	-11.70%	-4.63%	-8.09%
*Nonla Nove Harman				

^{*}While New Hampshire and Tennesse do not have a personal income tax, they do both tax interest and dividends so they both show personal income tax revenues

By relying on sales taxes and corporate taxes (and property taxes on a local level) rather than on personal income taxes, government revenue fluctuations over bad and good times are lower. Simply put, revenues from sales and corporate taxes are more stable and reliable than are income taxes.

^{**}Totaliax revenues for all states not including Washington D.C.

To wit, personal income tax receipts for all states were down 13.6% for the twelve month period ended June '09 from the same period ended June '08. Corporate income tax receipts were down 10.9%, while sales tax receipts were down only 4.8%.

Meanwhile, of the 39 states with a personal income tax, corporate income tax, and sales tax, the sales tax component of total tax revenue experienced the smallest percentage decrease (or largest percentage increase) in 33 of those 39 states. In the other six states, the sales tax experienced the second smallest decrease. Preliminary tax data for the third quarter tell much the same story.

J. Missouri's Sales Tax, Effectuating the Tax Swap²

In order to gauge Missouri's ability to make the tax swap from a state income tax to a state sales tax, let us continue with our example comparing the tax structure in Missouri with that of Tennessee. Missouri levies a state personal income tax of 6.0% beginning at \$9,000 of income. The state also levies a state sales tax of 4.225%, 3% of which goes to general revenue. Counties and municipalities have the authority to levy additional sales taxes, and due to large variation in the local portion of the sales tax, the cumulative sales tax ranges from 4.73% in rural Ripley County to 8.24% in the city of St. Louis.

Tennessee, on the other hand, has no state personal income tax but levies a state sales tax of 7%, all of which goes to general revenue. Counties and municipalities have the authority to levy an additional sales tax of up to 2.75%. There is thus less variability in the sales tax rate throughout Tennessee, ranging from 8.5% in Johnson County to 9.75% in Haywood County.

The main difference in the structure of the sales tax in Tennessee versus the structure in Missouri, however, is that Tennessee has a larger sales tax base—goods and services are eligible for taxation in Tennessee while they are not in Missouri. In addition, Tennessee raises a significant amount of revenue through special categorical taxes, such as cigarette taxes and franchise taxes.

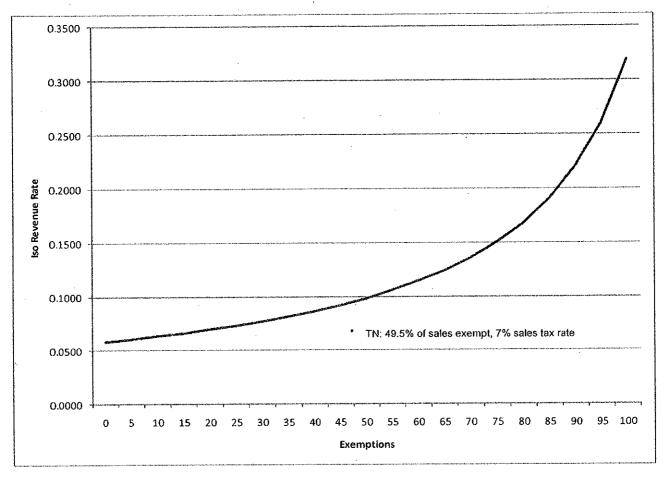
² This analysis was provided to us by Professor Joseph Haslag of the University of Missouri and the Show-Me Institute.

Eliminating the Missouri state income tax and replacing it with a sales tax would require raising an additional \$5.6 billion via the state sales tax in order for the tax swap to be static revenue neutral. The increase in revenues can be achieved by: a) increasing the sales tax rate, b) broadening the sales tax base, or c) some combination of a and b.

In the figure below, we display an estimated iso-revenue line for the state of Missouri, depicting the different combinations of state sales tax rate and the percentage of all sales within the state that could be exempt from a sales tax that would generate the necessary sales tax revenues (Figure 2). The sales tax rate would need to be raised, and the base would need to be broadened, but the locus of combinations if feasible.

Figure 2

Iso-Revenue Line: Missouri Sales Tax Rate and Base Combinations



Source: Missouri Office of Administration, Bureau of Economic Analysis, Laffer Associates Calculations

Finally, the Tennessee Department of Revenue estimates revenue lost due to various sales tax exemptions. If we assume the economic composition in the two states is similar, we can then extrapolate the revenue lost from those same exemptions in Missouri.

Table 8

Revenue Lost due to Sales Tax Exemption—Tennessee Actual and Missouri Estimate (Services)

Services Not Subject to Sales Tax Today	Tennessee	Source: TN State Department of Revenue			Missouri	Source: Modeling from TN Base			
	Total size	%	Revenue Lost	Tax Rate	Tolal size	%	Tax Rat		
State GDP	\$ 262,834,700,627.18	100%		7%	\$ 242,278,390,389.08	100%		. : 79	
State Budget	\$ 27,518,397,900.00	10,47%	· · · · · · · · · · · · · · · · · · ·		\$ 22,939,976,570.00	9.47%	***		
Health Care & Social Services (For-profit)	\$ 10,748,571,428.57	4.09%	\$ 752,400,000.00	7%	\$ 9,907,925,317.63	4.09%	\$ 694,339,217.5	0 79	
Physicians & Dentists	\$ 6,212,857,142,86	2.36%	\$ 434,900,000.00	7%	\$ 5,726,949,389.47	2.36%	\$ 401,339,879.9	7 79	
Other Health Practitioners	\$ 735,714,285.71	0,28%	\$ 51,500,000.00	7%:	\$ 678,174,048.19	0.28%	\$ 47,525,876.8	0 79	
Hospitals	\$ 1,240,000,000.00	0,47%	and the same of the same		\$ 1,143,019,560.83			•	
Nursing & Residential Care Facilities	\$ 1,182,857,142.86	0.45%	\$ 82,800,000.00	7%	\$ 1,090,345,848.35	0.45%	\$ 76,410,535,9	0 79	
Outpatient Care Centers	\$ 451,428,571.43	0.17%			\$ 416,122,328.60		\$ 29,161,508.8	7 7	
Medical and Diagnositic Laboratories	\$ 354,285,714.29	0.13%		are a real real growing	\$ 326,577,017.31				
Other Selected Health Services	\$ 150,000,000.00	0.06%	garan in a cinamanan anan an	*******	\$ 138,268,495.26		CA SECULO		
Social & Community Services	\$ 421,428,571.43	0.16%	and a commentation		\$ 388,468,629,5				
and the second s	The second second second								
Construction Services	\$ 10,470,000,000.00	3.98%			\$ 9,651,140,969.2	*	e e a comé ou e manda		
Construction of Buildings	\$ 3,462,857,142.86	1.32%	lan i lan lan i		\$ 3,192,026,976.33				
Heavy and Civil Engineering Construction	\$ 1,447,142,857.14	0.55%	'a 'en maniera d'arras a		\$ 1,333,961,768.50				
Specialty Trade Contractors	\$ 5,580,000,000.00	2.12%	\$ 389,200,000.00	7%	\$ 5,125,152,224.30	2.12%	\$ 359,166,432.0	2 79	
Professional & Technical Services	\$ 10,075,714,285.71	3.83%	\$ 705,300,000.00	7%	\$ 9,287,692,353.17	3.83%	\$ 650,873,803.9	7 7	
Accounting, Tax Return Prep., & Payroll	\$ 1,321,428,571.43	0.50%	\$ 92,500,000.00	7%	\$ 1,218,079,601.12	0.50%	\$ 85,362,011.7	2 7	
Advertising & Public Relations	\$ 454,285,714.29	0.17%	\$ 31,800,000,00	7%	\$ 418,756,014.22	0.17%	\$ 29,346,075.3	8 7	
Architectural Studies	\$ 347,142,857.14	0,13%	\$ 24,300,000.00	7%	\$ 319,992,803.32	0.13%	\$ 22,424,831.1	9 7	
ingineering Services	\$ 2,108,571,428.57	0,80%	\$ 147,600,000.0	D 7%	\$ 1,943,659,990.54	0.80%	\$ 136,210,085.7	3 7	
All other Architectural, Engineering, & Retated Services	\$ 202,857,142.86	0.08%	\$ 14,200,000.00	7%	\$ 186,991,679.3	0.08%	\$ 13,104,222.3	4 7	
Specialized Design Services	\$ 241,428,571,43	0.09%	\$ 16,900,000.00	7%	\$ 222,546,435,2	0.09%	\$ 15,595,870.2	5 7	
Computer Systems Design & Related Services	\$ 667,142,857.14	0.25%	\$ 46,700,000.0	D 7%	\$ 614,965,593.2	0.25%	\$ 43,096,280,5	1 7	
Legal Services (profit & non-profit)	\$ 2,314,285,714.29	0.88%	\$ 162,000,000.0	0 7%	\$ 2,133,285,355.4	0.88%	\$ 149,498,874.5	8 7	
Management, Scientific, & Technical Consulting	\$ 2,130,000,000.00	0.81%	\$ 149,100,000.0	0 7%	\$ 1,963,412,632.73	0.81%	\$ 137,594,334.5	7 7	
Scientific Research & Development (profit & non-profit)	\$ 288,571,428.57	0.11%	\$ 20,200,000.0	0 7%	\$ 266,002,248.0	0.11%	\$ 18,641,217.6	9 79	
Health Care & Social Services (Non-profit)	\$ 6,670,000,000.00	2.54%	\$ 466,900,000.0	0 7%	\$ 6,148,339,089.3	2.54%	\$ 430,870,521.8	7 7	
	and the state of the same	4 1 4 1 40 40	g man i dinambanan		\$ 5,101,449,053.76				
Hospitals	the state of the s	0.15%			\$ 354,230,716.4				
Nursing & Residential Care Facilities	\$ 384,285,714.29 \$ 372,857,142.86				\$ 343,695,973.9				
Outpatient Care Centers	\$ 94,285,714.29	4	jan et dene i	e e e e j	\$ 88,911,625.5				
Other Selected Health Services		0.04%			\$ 262,051,719.5				
Social & Community Services	\$ 284,285,714.29	U, 1176	\$ 19,800,000.0	. 176	3 202,001,718.00	0,1176	. φ 10,004,301.5	3 1	
Administrative & Support Services	\$ 5,170,000,000.00	1.97%	\$ 361,900,000.0	0 7%	\$ 4,765,654,136.7	1.97%	\$ 333,973,103.1		
Collection Agencies & Credit Bureaus	\$ 321,428,571.43	0.12%	\$ 22,500,000.0	0 7%	\$ 296,289,632.76	0.12%	\$ 20,763,732.5		
Employment Services	\$ 2,938,571,428.57	1.12%	\$ 205,700,000.0	0 7%	\$ 2,708,745,664.3	1.12%	\$ 189,826,657,4	2 7	
investigation & Security Services	\$ 624,285,714.29	0.24%	\$ 43,700,000.0	0 7%	\$ 575,460,308.8	0.24%	\$ 40,327,782.8	3 7	
Mall, Document Reproduction, & Call Centers	\$ 228,571,428,57	0.09%	\$ 16,000,000.0	0 7%	\$ 210,694,849.9	0.09%	\$ 14,765,320,9	5 7	
Services to Buildings & Dwellings	\$ 1,057,142,857.14	0.40%	\$ 74,000,000.0	0 7%	\$ 974,463,680.8	0.40%	\$ 68,289,609,3	8 79	

Table 9

Revenue Lost due to Sales Tax Exemption—Tennessee Actual and Missouri Estimate (Goods)

Goods Not Subject to Sales Tax Today	Tennessee Source: TN State Department of Revenue		int of Revenue	Missouri	Source: Modeling from TN Base			
the second secon	Total size	·%	Revenue Lost	Tax Rate	Total size	%	Revenue Lost	Tax Rate
State GDP	\$ 262,834,700,627	100%		7%	\$ 242,278,390,389	100%		
State Budget	\$ 27,518,397,900	10.47%	:		\$ 22,939,976,570	9.47%		
Sales Taxes	\$ 27,486,942,857	10.46%	\$1,924,086,000	7%.	\$ 25,337,188,186	10.46%	\$1,775,609,207	
Gasoline	\$ 6,956,014,286	2.65%	\$ 486,921,000	7%	\$ 6,411,984,189	2.65%	\$ 449,346,553	79
Diesel (uel	\$ 2,699,014,286	1.03%	\$ 188,931,000	7%:	\$ 2,487,924,293	1.03%	\$ 174,351,678	79
Gasoline/diesel for agriculture	\$ 188,485,714	0.07%	\$ 13,194,000	7%	\$ 173,744,241	0.07%	\$ 12,175,853	3 79
Prescription drugs, insulin, and related	\$ 5,208,014,286	1,98%	\$ 364,561,000	7%	\$ 4,800,695,324	1.98%	\$ 336,428,761	1 79
Prescription drug-samples	\$ 651,071,429	0.25%	\$ 45,576,000	7%	\$ 600,151,112	0.25%	\$ 42,058,094	5 79
Energy fuels sold for residential use	\$ 4,659,485,714	1,77%	\$ 326,164,000	7%	\$ 4,295,067,189	1.77%	\$ 300,994,759	79
Energy and water sales to man, for direct processing	\$ 1,620,742,857	0.62%	\$ 113,452,000		\$ 1,493,984,507	0.62%	\$ 104,697,200) 7
industrial and farm machinery and equipment	\$ 2,626,314,286	1.00%	\$ 183,842,000	7%	\$ 2,420,910,162	1.00%	\$ 169,655,383	3 7
Packaging sold for resale or use	\$ 1,469,857,143	0.56%	\$ 102,890,000	7%	\$ 1,354,899,569	0.56%	\$ 94,950,242	2 79
School books and lunches	\$ 301,014,286	0.11%	\$ 21,071,000	7%	\$ 277,471,949	0,11%	\$ 19,445,005	5 7
Membership dues of civic organizations & associations	\$ 294,614,288	0.11%	\$ 20,623,000	7%	\$ 271,572,493	0.11%	\$ 19,031,576	5 79
Prescription eyewear and optical goods	\$ 241,642,857	0.09%	\$ 16,915,000	7%	\$ 222,743,962	0.09%	\$ 15,609,713	3 79
Newspaper periodicals	\$ 192,585,714	0.07%	\$ 13,481,000	7%	\$ 177,523,579	0.07%	\$ 12,440,706	6 7°
Motor vehicles sold to active-duly or non-resident military personnel	\$ 115,585,714	0.04%	\$ 8,091,000		\$ 106,545,752	0.04%	\$ 7,466,638	B 79
Physical fitness facility fees	\$ 86,714,286	0.03%	\$ 6,070,000	7%	\$ 79,932,359	0.03%	\$ 5,601,594	4: 79
Railroad rolling slock, materials and repairs	\$ 69,557,143	0.03%	\$ 4,869,000	7%	\$ 64,117,077	0.03%	\$ 4,493,272	2 79
Film and transcription rentals	\$ 61,942,857	0.02%	\$ 4,336,000	7%	\$ 57,098,304	0.02%	\$ 4,001,402	2 7
Fertifizers, pesticides, seeds, and related items	\$ 44,285,714	0.02%	\$ 3,100,000	7%	\$ 40,822,12	0.02%	\$ 2,860,78	1 7
Total	\$ 27,486,942,857	10.469	\$ 1,924,086,000	7%	\$ 25,337,188,18	3 : 10.46%	\$ 1,775,609,20	7 7

Conclusion

Missouri's proposal of a eliminating the state income tax via a revenue neutral increase in the state sales tax would represent a positive change for the state. First, the downside of the tax swap appears to be minimal, if not non-existent—Tennessee currently has a tax structure very similar to the one being proposed in Missouri and has an economy that is performing better than Missouri's. Just as importantly, Missouri seems poised to experience significant gains from the tax swap.